

# THE NATION'S BUSINESS

December



1924

## Your Loaf of Bread, 1924 Model

I. K. RUSSELL tells how baking, the world's oldest industry, has become revolutionized overnight

## The Pig That Didn't Go to Market

WILLIAM FEATHER describes how he abolished manufacturer, middleman and retailer—and what it cost him

## The Right Approach to the Parking Problem

ALFRED REEVES, General Manager, National Automobile Chamber of Commerce, says that it's one which can be solved

## Old As the Hills Is Regulation

JAMES E. BOYLE, Professor of Rural Economy, Cornell University, shows how we are still trying economic nostrums that were proved useless three centuries ago

## In Whose Hands Is the Country's Wealth?

SILAS BENT questions W. R. INGALLS and learns how widely it is divided

*Map of the Nation's Business, page 50*

*Complete table of contents on page 5*





# You can "build" on Austin Guarantees

## When Austin Builds for you



**1** A guarantee that the estimated cost of your building project will be the final cost to you is a part of the Austin Contract.

**2** A guaranteed delivery date, included in the terms of your contract with The Austin Company, means that your plant will be ready by a specified time.

**3** You are assured of the highest quality of materials and workmanship by the guarantees made a part of the Austin contract.



**F**OR BACK of these guarantees is the Austin Organization with more than fifty years of building success in 46 major industries.

By "building success" is meant two things—success for the owners as well as for The Austin Company.

For the owner, successful building means a plant properly designed and laid out for efficient operation; built for permanence by seasoned construction crews; coupled with the provisions of the three-fold guarantees.

Guarantees of complete satisfaction—"building success"—are found in the co-ordination of the three highly developed phases of the Unit Responsibility Plan—Design, Construction and Equipment.

The Austin Nation-Wide Organization plus Unit Responsibility means that Austin will shoulder the whole load anywhere you want to build.

Ask for the booklet, "The A No. 1 Plan," which outlines very clearly the working of Austin Unit Responsibility.

**THE AUSTIN COMPANY, Engineers and Builders**

New York Chicago Pittsburgh St. Louis Birmingham Detroit Philadelphia  
Seattle Portland The Austin Company of California: Los Angeles, San Francisco  
The Austin Company of Texas: Dallas

**Nation Wide  
Organization**



**With Unit  
Responsibility**

**Finance • Design • Construction • Equipment**





## Ted Starr doesn't want a cuff on his trousers

Jenkins, salesman at A. De Pinna, recognized his signal and stepped to the city phone. "Hello, Mr. Starr—Oh yes—you don't want a cuff? All right, hold the wire—I'll fix that in a minute." Setting down the receiver of the city phone, Jenkins dialled two figures on a handy P-A-X phone and spoke directly to the alteration department. "Never mind about the cuff on 7444A—" Then turning to the city phone—"All right, Mr. Starr—No trouble—Tomorrow sure. Goodbye."

Whether you make clothes, rubber tires or chewing gum, you will find that, like De Pinna, Goodyear and Wrigley, your organization will profit by the P-A-X.

By means of the P-A-X, customers may talk to your entire organization

through you. While they hold the city wire you can dial any department and get information for them. No calling back. Service like this builds business.

For 24 hours a day the P-A-X handles all inter-communication calls instantly and accurately. There is no operator to delay connections, give the wrong number, or to "listen in" on conversations.

Besides Interior Telephony, the Automatic Electric Services of the P-A-X include Code Call, Conference Wire, Executives' Priority Service, etc. For nearly 2,000 organizations in every field of business, the P-A-X has proved itself a vital necessity and actually paid for itself in a short time by saving operators' salaries.

*The P-A-X is similar to the Automatic Telephone equipment being so widely adopted for city service. It augments and completes but neither supplants nor connects with local or long distance telephone service.*

## Automatic Electric Company

*Originators of the P-A-X. For more than 20 years the engineers, designers and manufacturers of the Automatic Telephone in use the world over. Home Office and Factory, Chicago, Ill., Branch Offices: NEW YORK, 21 East Fortieth St.; CLEVELAND, Cuyahoga Bldg. Representatives in all principal cities. In Canada—Address: Northern Electric Co., Ltd., 121 Shearer St., Montreal, P. Q. Abroad—Address: International Automatic Telephone Co., Norfolk House, Norfolk St., Strand, London, W. C. 2, England. In Australia—Address: Automatic Telephones, Ltd., Mendes Chambers, Castlereagh St., Sydney, Australia.*

**P-A-X**  
TRADE MARK  
**PRIVATE AUTOMATIC EXCHANGE**





Three great factories are devoted exclusively to the manufacture of International Trucks. A corps of factory-trained Road Engineers inspect regularly and without charge all Internationals in service. These engineers travel out of our 105 direct company branches located in the following cities:

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Amarillo, Tex.  
Alameda, Cal.  
Albany, N. Y.  
Aurora, Ill.  
Baltimore, Md.  
Billings, Mont.  
Birmingham, Ala.  
Bismarck, N. D.  
Brenton, Mass.  
Buffalo, N. Y.  
Cedar Falls, Iowa  
Cedar Rapids, Iowa  
Charlotte, N. C.  
Chattanooga, Tenn.  
Cheyenne, Wyo.  
Chicago, Ill. (6)  
Cincinnati, Ohio  
Cleveland, Ohio  
Columbia, S. C.  
Columbus, Ohio  
Council Bluffs, Iowa  
Dallas, Tex.  
Davenport, Iowa  
Dayton, Ohio  
Denver, Colo.  
Des Moines, Iowa  
Detroit, Mich.  
Dubuque, Iowa  
Duluth, Minn.  
East St. Louis, Ill.  
Eau Claire, Wis.  
Elmira, N. Y.  
El Paso, Tex.  
Evansville, Ind.  
Fargo, N. D.  
Fort Dodge, Iowa  
Fort Wayne, Ind.  
Fort Worth, Tex.  
Grand Forks, N. D.  
Grand Rapids, Mich.  
Green Bay, Wis.  
Harrisburg, Pa.  
Helena, Mont.  
Houston, Tex.  
Hutchinson, Kan.  
Indianapolis, Ind.  
Jackson, Mich.  
Jacksonville, Fla.  
Kansas City, Mo.  
Knoxville, Tenn.  
Lincoln, Neb.  
Little Rock, Ark.  
Los Angeles, Calif.  
Louisville, Ky.  
Madison, Wis.  
Mankato, Minn.  
Mason City, Iowa  
Memphis, Tenn.  
Milwaukee, Wis.  
Minneapolis, Minn.  
Minot, N. D.  
Nashville, Tenn.  
Newark, N. J.  
New Orleans, La.  
New York, N. Y.  
Ogdenburg, N. Y.  
Oklahoma City, Okla.  
Omaha, Neb.  
Parkersburg, W. Va.  
Parsons, Kan.  
Peoria, Ill.  
Philadelphia, Pa.  
Pittsburgh, Pa.  
Portland, Ore.  
Quincy, Ill.  
Richmond, Ind.  
Richmond, Va.  
Rochester, N. Y.  
Rockford, Ill.  
Saginaw, Mich.  
St. Cloud, Minn.  
St. Joseph, Mo.  
St. Louis, Mo.  
St. Paul, Minn.  
Salt Lake City, Utah  
San Antonio, Tex.  
San Francisco, Calif.  
Sioux City, Iowa  
Sioux Falls, S. D.  
South Bend, Ind.  
Spokane, Wash.  
Springfield, Ill.  
Springfield, Mo.  
Terre Haute, Ind.  
Toledo, Ohio  
Topeka, Kan.  
Watertown, S. D.  
Wichita, Kan.  
Winona, Minn.

The largest company-owned motor truck service organization in the world. In addition to these company branches more than 1500 dealers, in as many communities from one end of the country to the other, are ready to serve International owners.

## FOR LOW-COST HAULING



ANY truck may be a truck—but the truck that can do your job reliably and profitably for the longest time is the truck you need. You will find that out sooner or later but the time to find it out is before you make your investment in hauling equipment.

Because of the world-wide scope of Harvester automotive activities no truck builder has had greater opportunity to learn truck transportation. Because of the extent of Harvester facilities, based on ninety-three years of manufacturing experience, none could have taken better advantage of it. International Trucks are built and sold on the most practical basis for low-cost hauling in every line of business.

We have more than a hundred Company-owned branches in this country. From these branches operates a force of Truck Transportation Engineers ready to serve transportation users in any line of business in any part of the country. Out of these branches travels a corps of Road Engineers inspecting free at regular intervals every International Truck in operation.

The Harvester Company's twenty years of truck building has developed a demand and a reputation for International Trucks that today calls for the output of three great factories devoted exclusively to motor truck manufacture. The products of these factories—the products of our experience—are at your service.

International Heavy-Duty Trucks are built in 3000, 4000, 6000 and 10,000 pounds maximum capacities with bodies to meet every requirement. There is a Special Delivery of 1500 pounds capacity and a sturdy Speed Truck for loads up to 2000 pounds. Motor Coaches are supplied to meet every passenger transportation need. Upon request we will gladly supply you with information desired on any models, and the address of the nearest showroom where the full line is on display.

INTERNATIONAL HARVESTER COMPANY  
606 SO. MICHIGAN AVE. OF AMERICA (INCORPORATED) CHICAGO, ILL.

# INTERNATIONAL HARVESTER TRUCKS COMPANY

When writing to INTERNATIONAL HARVESTER COMPANY OF AMERICA please mention the Nation's Business





# The Baltimore & Ohio Railroad Company

*Announces the Opening of its*

## LOCUST POINT EXPORT ELEVATOR!

Baltimore, Md.

**The Most Modern Elevator in the World! Built of Concrete!**

*Complete in Every Detail!*

*The Fastest in Operation!*

*The Most Efficient!*

*Equipped with Four Dumpers!*

Unloading Capacity, 256 Cars Per Eight Hour Day

Storage Capacity . . . . . 3,800,000 Bushels

Working Capacity . . . . . 3,600,000 Bushels

Necessary Grain Cleaners and Oat Clippers and Grain Separators!

Grain Drying Facilities, 6,000 Bushels Per Hour!

Ship Loading Capacity, 75,000 Bushels Per Boat, Per Hour!

Marine Leg (Suction Type) to Unload Vessels!

CAN BERTH EIGHT VESSELS AT ONE TIME; CAN LOAD SIX AT ONE TIME!

SEPARATE FACILITIES FOR LOADING FULL CARGO BOATS!

BERTHS FOR LOADING GRAIN AND MERCHANDISE AT THE SAME TIME!

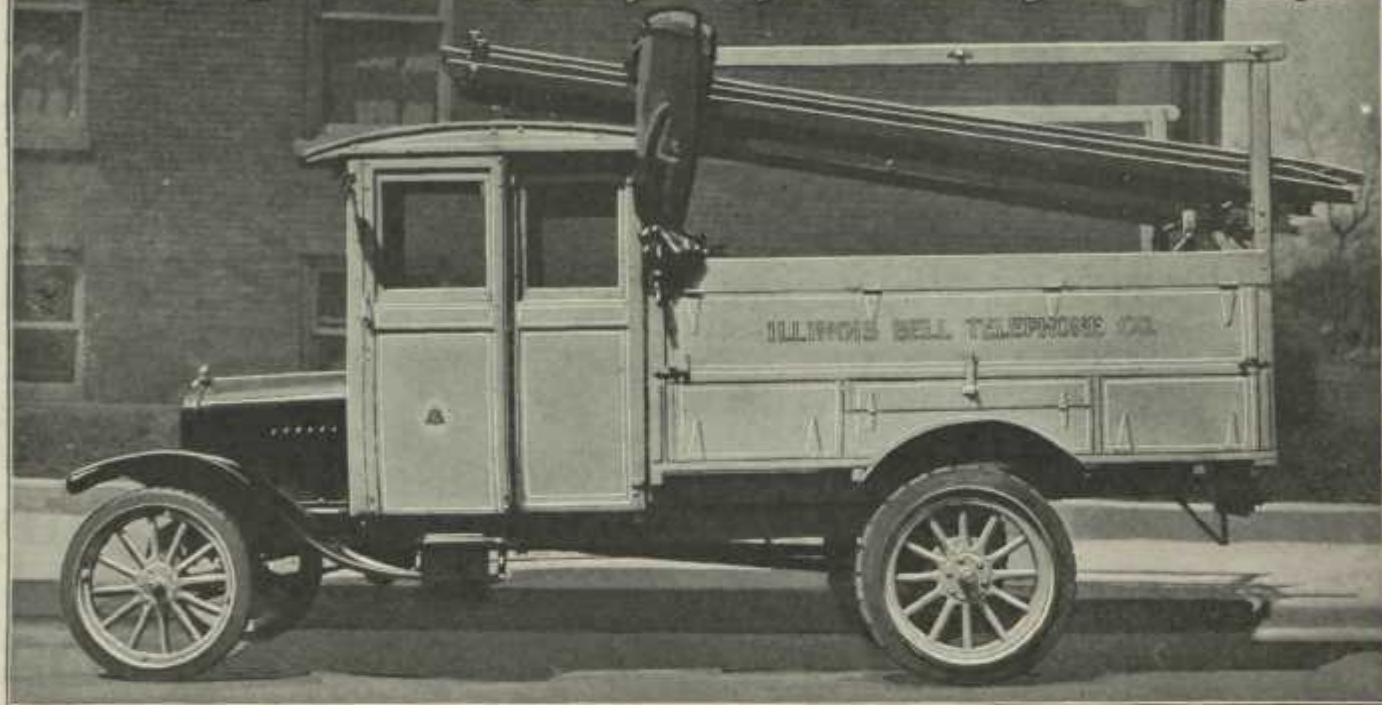
*For Service: Ship Your Grain to Baltimore Via*

# BALTIMORE & OHIO

## THE LINE OF THE CAPITOL LIMITED



# Illinois Bell Telephone Operates Over 500 Ford Cars and Trucks



## Yearly Mileage Runs into 7 Figures—Fleet Shows Very Low Operating Cost per Mile

Called upon to deliver dependable and economical service under all conditions, day and night, and to carry, at times, excessive loads over good and bad roads, *and in places where there are no roads*, this fleet of Ford Cars and Trucks has performed in a manner that merits the attention of every car and truck user.

For working under these conditions the mileage delivered by this fleet runs into the seven figures every year. The cost of operation is *very low*. In fact, only dependable service rendered at the lowest cost could justify the installation of this large fleet. Public Service Corporations also find the Fordson especially well suited to heavy

hauling, road and construction work, pole dragging, cable pulling, etc. In fact, municipalities, contractors, engineers and manufacturers everywhere depend on Fordson for low-cost industrial power. Fordson is adaptable to power work of all kinds.

Let your nearest Authorized Ford dealer demonstrate the economy of Ford Products in your business.

# Ford

CARS • TRUCKS • TRACTORS







## Through the EDITOR'S SPECTACLES

WE HAVE just elected a new General Manager of this great 100-billion-dollar corporation of which you and I are stockholders. Our selection of him is different from the selection of the head of an industrial corporation. Political campaigns with their attendant bitterness, their personal attacks, their false reports, stretching over a half year, are doubtless necessary evils of democratic government, but they are a liability in the strict economic sense. If the stockholders of a business concern threw brickbats of rumor at their chief executive as we do at ours, they would get small and infrequent dividends.

If ever a peace-time General Manager needed the nonpartisan and unselfish counsel and support of his stockholders—and particularly business men—our newly chosen executive does. The White House calendar is quite different from that of twenty years ago. Today 90 per cent of it deals with questions arising from the relations of government and business.

Unconsciously, perhaps, we have come to ask Washington to cure all our ills. If sugar is too high, we ask Washington to lower the price; if wheat is too low, we ask government to raise it; if freight rates are unsatisfactory, we ask Washington to lower them and at the same time increase railway wages. It seems that whenever the weather, or Old Man Economics, gives us a jolt we run to Washington for relief. There is hardly a single, simple phase of business today that is not touched in some way by legislation or proposed legislation, state or federal.

Our General Manager has a man-sized job.

ACROSS the park from where I sit is the White House. It is Tuesday. Today our General Manager will call together his cabinet to discuss recommendations which go to our Board of Directors, meeting next month on Capitol Hill. I can imagine him rising at the head of the council table. He looks tired; he has done a day's work already. He has just shaken hands with a delegation of Royal and Ancient Spiders, Lodge No. 2004, and with a convention of the S. P. C. S. P. G. (Society for the Prevention of Calling Sleeping-car Porters "George"); he has just had an interview with Michael Shean who is pushing a wheelbarrow across country from Shad Row, and who has been presented by his senator; he has stood for his picture with a delegation of serious ladies organized to see that walls in wooden-leg factories are painted green. In each case our vigilant press has insisted on our G. M. going out to the lawn to have his picture taken. . . . Some day, we'll learn why our General Managers break down! But that is another story. . . .

TO RETURN: I can imagine the General Manager rising and saying: "Gentlemen, we have a pretty full calendar today, and I need your help. The first item on the calendar is Finance. How are we to raise the four billions needed to run this corporation next year? Our stockholders are complaining not only of the large amount, but also

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## THE NATION'S BUSINESS

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CLIP THIS FOR YOUR SECRETARY TO FILE



THE WALL OF CHINA

**Once Made by the Mile Like Ours**

**G**ENERATIONS of toiling coolies piled stone into the great Wall of China—a legendary marvel of former days.

The wall of Mount-Partition—marvel of the present business age—has equalled the length of the Wall of China in 32 years!

Eighteen hundred miles of Mount-Partition have protected American business against high rentals, confusion, delay and inefficiency. The patented simplicity of construction, and perfected adaptability to all types of business give every local carpenter the opportunity to serve your office as Mount & Robertson have served New York.

Ask to see partial list of our clients.  
(Instruct your local carpenter to obtain our figures from his measurements.)

**MOUNT & ROBERTSON, Inc.**

Established 1892

41 Beaver Street, New York



MODERN OFFICE

**MADE BY THE MILE**  
Reg. U. S. Pat. Off.  
**SOLD BY THE FOOT**

Examination of a miniature Mount-Partition shows how the patented pin locks two sections rigidly—without screws or fastenings.

Shipped on request.



**OFFICE PARTITIONS**

of the inequity of the assessments. The old-fashioned yardstick of a poll tax won't do. Today we run the gamut of intangibles from good-will to obsolescences.

"And we have some bills coming due—war bills, several billion of them. How shall we pay them, by curtailing, refunding or how? In this connection I might say there are repeated criticisms from our stockholders that we are carrying some billions on our books owed us by foreign countries, which should be charged to profit and loss for the benefit of all concerned. I need your advice.

"And shall we abolish the right to issue tax exemptions?

"And the Federal Reserve System? Certain classes are demanding that they be represented on the board instead of bankers, and I am afraid that others—boilermakers and tanners, and school teachers—will demand the same right. Furthermore, the National Banks are leaving the system because of restrictive measures.

"And shall we buy the farmers' wheat? Or fix the prices?

"Or help decide what Germany should pay?

"I need your counsel."

At this point the General Manager's eye catches the next item on the calendar: Transportation.

Six different kinds, including air.

"Gentlemen," he might very well go on, "what can we do about freight rates? My mail is cluttered up with protests from all parts of the country. It seems no one is satisfied, and maybe rightly so. As I understand it, our rail rates, because of the state regulations, are a most unscientific mess. Can we have scientific tariffs?

"How prevent industrial disputes? Shall the Labor Board go?

How finance the railroads for the necessary development to meet certain needs of the next two or three years—not to speak of the next ten years? How carry out the mandate of our Board of Directors for consolidation of rail systems? Would federal incorporation relieve?

"I have a memo here on ships," he continues. "We have a great merchant marine, but ownership is like having a bear by the tail. It is costing us a cool million every week, and endless grief. Not to mention the unfair competition with our stockholders who operate ships. What to do? Sink the ships, sell them to the lowest bidder, lease them, or operate them. How finance their operation? By taxation, outright subsidy, or sugarcoat the pill by mail subvention, bonuses, exemption from tax, preferential duties, modification of the Seaman's Act, or repeal of our inspection laws?"

**F**ROM rails and ships our chief executive asks for counsel on the financing of our 20-billion-dollar highway industry; where routes shall be laid out; how relate state and federal aid; how rail and road shall be coordinated to the best interests of the public.

And so on through those other arms of transportation, electric roads, important arteries tying up rural and city life; waterways, with their intricate and complex factors; air, bringing new problems of federal regulation and control, both as to freight and passenger travel, as well as communication.

Finance and Transportation are only two of the fifteen or twenty major items on the White House calendar today. Our highly intricate industrial system is daily becoming more and more complex. Engage any casual acquaintance in conversation, and ten to one you will find his interest in the "cost of things." "Why should I pay fifteen cents for

## Are Your Buildings Standardized?

Standardized or fixed types of buildings for housing certain industries have been developed and perfected by this company.

These designs are based upon our seventeen years of experience in the design and management of construction of these buildings.

We give our clients the full benefit of these standardized plans, added to that of competitive bids thereon, and our effective system of supervision.

May we send additional information?

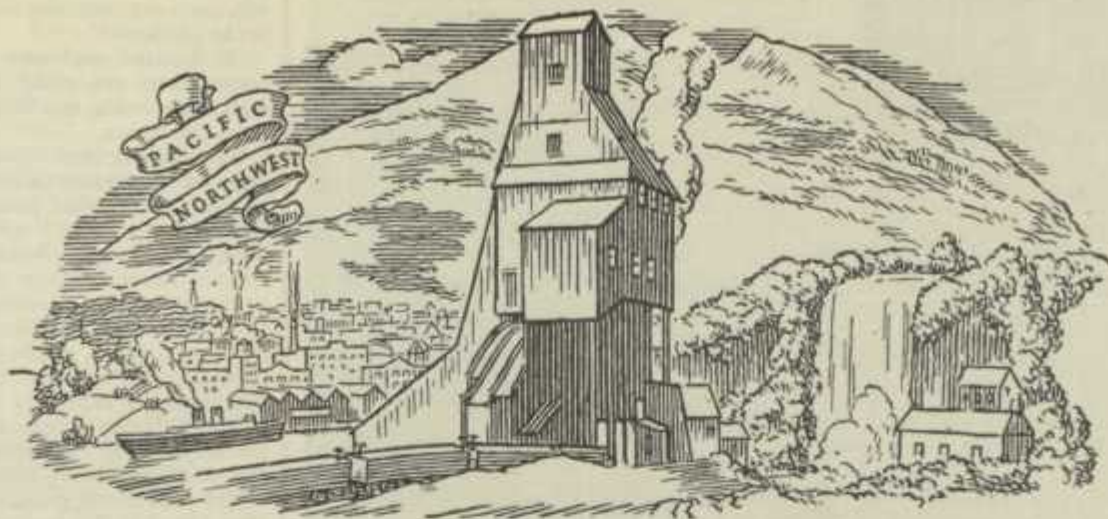
## THE WATSON COMPANY

WILBUR J. WATSON—President

4614 Prospect Avenue  
Cleveland, Ohio

15 Park Row  
New York, N. Y.





## RAW MATERIALS, PORTS & POWER

Ten Niagara Falls, a dozen Iowas, a Pennsylvania or two, three or four harbors of New York, and six or seven other things that have no parallel anywhere in this country!

It requires a mighty sweep of the imagination to picture all this tucked away in an area one-sixth as great as the United States.

Yet all this and more besides exist in the five states of the Pacific Northwest—Washington, Oregon, Idaho, Montana and Wyoming!

Here is almost half the potential water power of the nation, the strength of twenty-six million horses, indestructible energy capable of harness for industrial use.

Here is half the country's standing timber, enough to rebuild every house in the United States just three times over.

Here oil wells and mines of coal and metals yield a million dollars a day—in a region whose mineral resources are yet comparatively unexplored!

Here is food for a hundred million—one-sixth the country's wheat, half the world's commercial apple crop, untold wealth in fruits, dairy products, truck produce and live stock. With Alaska, their near neighbor, Washington and Oregon share the world's great fishing industry, worth a hundred million a year.

Here are seaports naturally endowed with harbor facilities unknown on our Atlantic Coast, facing an awakened Orient and marking the shortest route to the rising buying power of three-quarters of the earth's whole population.

Here is the trading point for all Alaska's future greatness, a greatness still untapped and unimagined.

Here are raw materials, ports and power—the formula complete to build a mighty empire!

Fifty years ago most of this territory was an unpeopled wilderness. Today it boasts thriving cities of hundreds of thousands and manufactures products to the value of five million dollars a day.

Its fruit is famous to the shores of Africa, its salmon a familiar dish on every European table. The markets of the world accord its wheat a premium. Hindu princes wear its sapphires. Its ships sail every sea.

Yet even those who live in the Pacific Northwest have just begun to realize its greatness. The consciousness of empire is at last upon them.

In the Pacific Northwest now, a thousand opportunities lie open to American industrial enterprise.

### What 1,000,000 horsepower can do

Electrify 250,000 homes, serving 1,000,000 persons.

Operate 2400 miles of electric railways, carrying 450,000,000 persons annually.

Operate mining and reducing plants employing 40,000 miners.

Operate 13,000 factories employing 270,000 persons and producing \$1,400,000,000 worth of goods annually.

And irrigate 1,250,000 acres of land producing \$95,000,000 in crops annually and giving employment to 50,000 farmers and laborers.

And it can do not one, but all these things.

Multiply these figures by twenty-six. The result will give you an idea of what the Pacific Northwest's tremendous water power resources mean.

## THE PACIFIC NORTHWEST

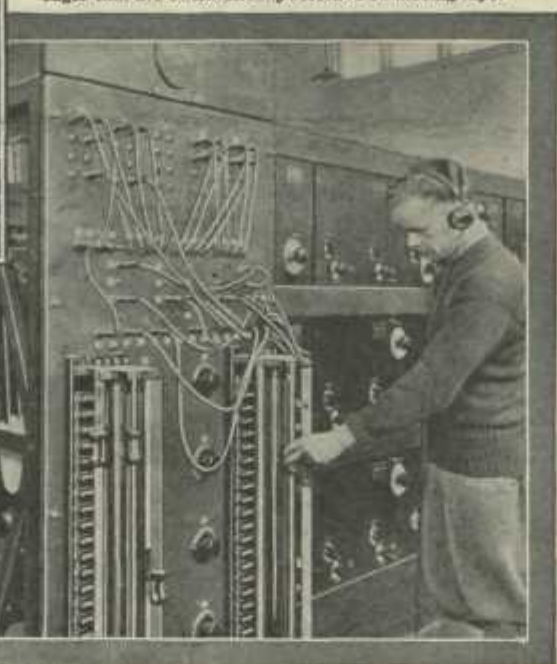
*The Chicago Burlington & Quincy R.R.  
The Northern Pacific Ry.  
The Great Northern Ry.*







Part of receiving room at Radio Corporation of America offices, New York City. Skilled operators typing messages that are automatically recorded on moving tape.



Panel board and amplifier at Riverhead, Long Island. Messages from Europe and South America are forwarded without relay from here to New York City, seventy miles away.

## Maintaining Speed and Accuracy

The big receiving station at Riverhead, Long Island, with its nine-mile antenna, its power panels, its banks of amplifiers, and its staff of skilled radio engineers, is but one link in the efficient transoceanic Radiogram service.

Messages from Europe are received, amplified and forwarded without rehandling by land wires to New York City, seventy miles away, where they are automatically recorded on moving tape.

Each dot and dash is recorded in New York the same second that the high power transmitting apparatus in Europe sends it out.

Direct circuits between America and England, France, Germany, Italy, Norway, Poland, Argentine and Hawaii and Japan are an assurance of swift and accurate Radiogram service. Mark your messages

# "Via RCA"

## RADIO CORPORATION OF AMERICA

RCA OFFICES IN THE FOLLOWING CITIES  
NEW YORK CITY

64 Broad Street.....	Broad 5100	6 West 19th Street.....	Watkins 7953
19 Spruce Street.....	Beekman 8220	1524 Broadway.....	Columbus 4311
126 Franklin Street.....	Franklin 2675	19 West 44th Street.....	Murray Hill 4996
	264 Fifth Avenue, Madison Square 6780		
	SAN FRANCISCO, 28 Geary Street		
	WASHINGTON, D. C., 1119 Connecticut Avenue, Main 7400		
	HONOLULU, T. H., 921 Fort Street		
CHICAGO.....	10 So. La Salle Street	PHILADELPHIA.....	The Bourse
BOSTON.....	109 Congress Street	CLEVELAND.....	1599 St. Clair Ave.
NEW ORLEANS.....	Carondelet Building	SEATTLE.....	Maritime Building
BALTIMORE.....	Gay & Pratt Streets	PORT ARTHUR, Texas.....	Realty Building
NORFOLK, VA.....	220 Brewer Street	LOS ANGELES.....	309 Equitable Building

# RADIOGRAMS

When writing to RADIO CORPORATION OF AMERICA please mention the Nation's Business

a package of oatmeal that brought the farmer who grew the oats one-sixth of a cent? Who is the profiteer?"

All kindred questions involved in Distribution costs are wildly alive today and demands are made on White House and Congress for action.

But what action? Congress spent a year, and a lot of money to locate the Distribution profiteer. It called producer, manufacturer, wholesaler, jobber, warehouse, salesman, banker, and retailer, hundreds of them, to the witness stand. Many of the congressional investigators had promised constituents to put the robber-middlemen in jail, but the unanimous report of the committee was: "We have searched and searched; the present system is highly expensive, the consumer's convenience, higher standards of living, and God are responsible. We don't see that any step can be eliminated by legislation."

The packer and grain exchange control laws were aimed at this "spread" between producer and consumer, but to the naked eye, like most other economic legislation, they have failed to show any of the results claimed for them by their political backers.

AT THE farther end of Distribution and the consumer are the natural resources, and there we find items on the White House calendar crying out for attention. Coal, and how to assure a steady supply to home and industries; unreclaimed land, 200,000,000 acres, and their disposition particularly in reference to their profitable salvage; timber, and the shortage complained of by industry in certain states which, with high freight rates, is shifting industry overnight; oil, shall we deny foreigners rights in the United States in retaliation for similar treatment to our people abroad? And Teapot Dome, and Muscle Shoals, and agriculture?

These questions are brought forcibly home to our General Manager, and an answer must be forthcoming—not an answer born of haste and expediency, but a statesmanlike answer grounded in economic fact.

There are many other items on the White House calendar affecting you and me as stockholders, but the day has not hours enough in it for the President to cover even those we have sketched here, nor is there space enough at our disposal to mention in any detail those other business problems in the fields of Insurance, Foreign Commerce, Manufacturing, Banking, Tariffs, Commercial Treaties, Trade Associations, Immigration, and the like.

WHAT MUST be apparent to all is that the job of chief executive of the United States today has become one demanding an almost superhuman grasp of business problems. In addition to this rare quality, there must be an uncanny ability to choose men as counsellors and administrators who in turn must be possessed of similar superhuman qualifications. For no one man can do the White House work single-handed; there must be executive organization.

The Steel Corporation could not be operated successfully by a Judge Gary single-handed; there must be a highly organized machine. The American Telephone and Telegraph with its army of 250,000 people could not be operated successfully by an E. B. Thayer single-handed, nor the Metropolitan Life by a Haley Fiske without skillful organization. Yet each of these enormous concerns is but a pin-prick in comparison with the 100-billion corporation, the United States of America.

It is unfortunate that it seems necessary



in a democracy to exercise great care lest successful business men be brought too near the seat of government. Even in wartime, before an eminent captain of industry could be drafted for a most important service, the country had to be sounded out to see if it were politically expedient!

As our form of government—which, please understand me, I would not change for any other—will not permit of the building up of a permanent business organization on lines of U. S. Steel, A. T. & T., or any highly efficient corporation, the next best thing is for us, the stockholders, to allow our managers to draft counsel and help wherever it can be found.

AND IF there is a moral or lesson in the picture I have drawn of Washington and the nation's business, it is already obvious to our readers. To get dividends from our business enterprises we choose managers and give them every support. We don't nag, circulate false reports, harass, and keep our executives continually on the defensive. We give enthusiastic cooperation, helpful counsel, and smite both cheeks of the unscrupulous detractor who attacks the integrity of our company's motives. The problems of our business enterprises are our personal problems and common sense prompts us to lend a hand cheerfully, toward their solution.

A BRITISH visitor came in to trade opinions on the Dawes plan. Everybody knows that Germany has the biggest stake in the plan. But it is what everybody doesn't know that the British visitor came in to tell us—the country that has the next biggest stake.

And of all countries—"Russia!" That's the name he gave us. And Russia not even mentioned at the conferences. Our friend's talk ran something like this:

The problem of reparations is how much the Allies can afford to receive, not how much Germany can afford to pay. The Allies will have to be paid from an excess of German exports over imports. Most of these exports are manufactured goods which will compete in the markets of the world with the manufactured products of the countries entitled to reparations.

Enter Russia. She needs immense quantities of manufactured products. She could easily take exports of manufactured goods. At the same time Russia would export raw materials.

The Allies could say to themselves, "Well, why not take from Germany potash, dyes and other materials we need; invest as much of our reparation credit as we can in Germany and in German industry, and then shift the balance of the reparation debt from Germany to Russia? Let Germany export manufactured articles to Russia. That would keep them out of our hard-won markets. We will credit Germany's account, and then we will let the Russians pay us with the raw material she has and which we need. We will build up Russia without having to lend her money, and Germany will be able to pay us without disturbing our markets."

And our visitor said it as though the Allies had said it.

WHAT to give a man friend or a business associate for Christmas?

Cigars? Golf balls? Well, both are good; but isn't it a fact that one is soon smoked up and the other lost in the rough?

Let us make a suggestion: Send your friend a thirty-six-number subscription to THE NATION'S BUSINESS. Price, about right for a gift, \$7.50. Your friend will receive it steadily every month for three years. And what other gift continues to hold its interest as long as that?

Send us the name and address of your



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## Light that Keeps Eyes Wide Open

ALL the wonder, all the surmise, all the questions that have been caused by the performance of Cooper Hewitt Work-Light in hundreds of American manufacturing plants can be answered in one simple sentence: "It is light that keeps eyes wide open."

That explains more and better production. It explains reduced accident hazard—reduced labor turnover—and points out, as well, the real basis for economical plant operation.

Eyes stay wide open under Work-Light because it is nine-tenths composed of greenish-yellow rays, the seeing rays of light. Thus the eyes have to focus practically for one color only, instead of the six that blur the image and create fatigue in all other light.

The Work-Light tube tells the rest of the story. It diffuses light evenly from a source fifty inches long, practically eliminating shadows and removing all possibility of glare.

The worth of any lighting system can fairly be judged only by the amount of perfect work produced by its aid. Put the question to a plant that you know is using Work-Light—or send for the Work-Light booklet today. Cooper Hewitt Electric Company, 123 River Street, Hoboken, N. J.

COOPER HEWITT

# Work-Light

© C. H. E. Co. 1924

## Three Unusual Slants on Three Great Industries

**BREAD**—An industry that overnight turned from the oldest to the newest, from a hand process to a machine, mass-production business. Read about it in this issue.

**THE MOVIES**—An industry that grew too fast. A business which has met a hundred years of distribution problems in fifteen. Watch for it in an early issue.

**FURNITURE**—An industry in which the wholesaler is almost extinct. A commodity where the buyer goes to the seller. Mark it down for a forthcoming issue.

**NATION'S BUSINESS**  
WASHINGTON

When writing to COOPER HEWITT ELECTRIC COMPANY please mention the Nation's Business

friend or friends, add your own name and address. You won't be billed till after January 1.

I'll take time off to write your friend, on our best stationery, that you are the donor of the gift, and that with it you send your best wishes for a merry Christmas. I'll time the letter and his first copy so as to reach him Christmas day. (Adv.)

TWO things make dramatic the article by I. K. Russell that leads this issue of THE NATION'S BUSINESS. After the pages were made ready for the press the author wrote us that Roberts, "the oven nut" who had played so great a part in remaking the baking industry, was dead. Dent Harrison, his friend, wrote to Russell just before Roberts died:

"He has given his life to the baking industry. Letters from valued friends are coming in from all parts of the country. He refers to them as stepping stones to Heaven."

A beautiful phrase!

The day after this letter came, the newspapers carried an announcement of a merger of three or four great baking companies into a corporation with millions of capital. And the "why" of that merging is made plain in Mr. Russell's article.

SEEING a note in this column recently concerning Farmer Ross, who sent in his check "as a business man" having lost \$5,000 on a shipment of baby beef, Mr. F. J. Hippie, of Hutchinson, Kansas, wishes to state that he, too, is a business-man-farmer. Evidence was aplenty in his check for a subscription to THE NATION'S BUSINESS, but he clinches it by saying that after losing his entire crop last year, he came back this year showing a substantial profit for the two years' operation.

LIKEWISE, Farmer A. J. Rankin, Jr., writing from Pittsburgh, says:

I am an agricultural man and I want to say am always glad to read your articles on agricultural subjects. I particularly liked "Oregon's Remedy for Farm Ills." If more of the states would hold such conferences and take a look at themselves, with their relation to local and national conditions, stop working in the dark, the farmer would get along much better. More leaders like Maris are what we need. Wish you would send the governor of Virginia that article.

AND we shall have to establish another nomenclature, that of business-man-preacher. The Reverend H. W. Virgin, of Amarillo, Texas, requesting us to change his address, takes occasion to express his "grateful appreciation," and adds:

I have cut out and filed away a number of articles. They are greatly heartening to a minister and they afford many splendid illustrations to emphasize the many truths which a minister has to present to his congregation. I count a single number to be worth a year's subscription.

And writes Rev. James F. Riggs, of Little Falls, N. Y.:

Your magazine is a credit to the country, and a tonic to business men in other lands.

ELSEWHERE in this magazine is the answer of W. R. Ingalls, engineer and economist, to the question:

"WHO OWNS THE UNITED STATES?"

Here is one short and impressive comment: "The American Telephone and Telegraph has 340,000 stockholders and nobody owns as much as 1 per cent of the stock."

M.T.



# On Time—Regardless



**H**ERE is another big advantage in buying Blaw-Knox buildings. It can rain, sleet or snow. The thermometer can go away down below zero. But, regardless of weather, your building will be ready for occupancy on schedule. And it will be a building you will be proud of—a fine type of weatherproof, permanent construction.

Blaw-Knox buildings are built of copper-bearing galvanized steel, pre-fabricated units and are erected in days instead of the weeks and months required for other types of permanent building. Rustproof and weatherproof, the first cost of these buildings is less and their maintenance cost less than any other kind of permanent buildings.

If you need a one-story building of any size from a factory to a garage, from a warehouse to a filling station, let Blaw-Knox show you what it can do for you. Remember these buildings can be easily

moved or enlarged. If you need more space at any time, simply order additional standard units. These will be shipped to you right from the Blaw-Knox factories. Remember, too, that the cost of the Blaw-Knox building is your complete building cost—there are no extras. Small cash payment and special financing plan if you wish.

Write today for Blaw-Knox book. You should by all means have this information on hand, even if you aren't planning to build immediately. It will pay you to know about Blaw-Knox.

**Blaw-Knox Company, Pittsburgh, Pa.**

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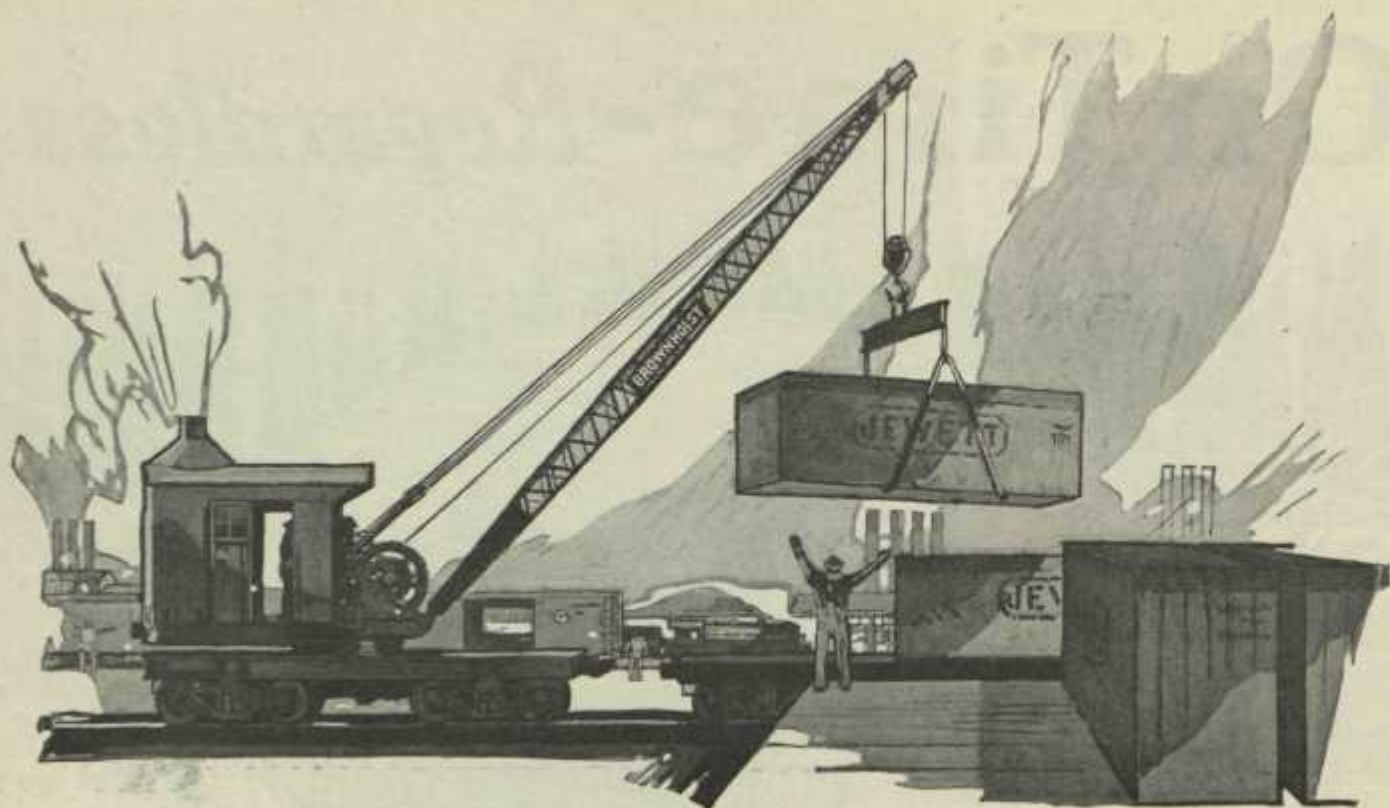
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HB-12





## Steady Work for their Brownhoist— Steady Savings for Paige-Jewett

*"It certainly is astonishing to see how rapidly the export department is able to load up a carload of four automobiles with this Brownhoist. They load a carload, nailing the boxes to the flat car complete, in about half an hour."*

So runs a letter from the Paige-Jewett Motor Car Co.—Detroit. And the saving doesn't stop with the car loading. The letter continues—

*"The crane is used about equally to load boxed automobiles for export and to handle coal with a clamshell."*

*"It is also used as a switch engine, pulling as many as 12 or 14 cars at a time."*

Leading companies the world over are using Brownhoists to speed production and shipping. At the same time they are making substantial savings in their handling expense.

Brownhoist engineers are specialists on material handling. Why not let them work with you on your handling problems? There will be no obligation on your part.

**The Brown Hoisting Machinery Co., Cleveland, Ohio**

Branch Offices: New York, Chicago, Pittsburgh, San Francisco, New Orleans, London, Eng.

Heavy Dock Machinery, Locomotive Cranes, Bunkers, Conveyors, Bridge Cranes, Buckets, Etc.

# BROWNHOIST

**M A T E R I A L   H A N D L I N G   M A C H I N E R Y**



## That Loaf of Bread, 1924 Model

By I. K. RUSSELL

Editor, Baking Technology

IF YOU'RE not one of those that want to eat your slice of bread and then forget it in favor of a romantic movie or a novel with a "kick" in it, this story should have a little place in your reading menu. For while it's about the bread you eat, it is not about the bread your father or mother ate or your grandfather before them.

It is about bread that no man bakes but that gets there just the same—with the help of the late Mr. Steinmetz and some forty or fifty different kinds of electric push buttons.

It isn't about the bread that Labor bakes, for Labor in your day and mine has turned this bread-baking job over to Capital—to Capital and electrically-driven giant machines. There never was anything like it in the world before.

Bread doesn't follow white flour up and down any more—and people who never guess why, do a lot of kicking at this seeming unfairness. It seems a wrong against them.

It is hard to say what great cities would do if these giant machines had not been invented and had not Mr. Steinmetz synchronized electric motors so they can be harnessed up to pull together, for a loaf of bread that makes you for-

get whether it is good or bad the minute you have eaten it.

Just before writing this I stood at the end of an oven, out of which bread was pouring in a regular Niagara. Two more ovens, one at either side, were pouring bread loaves out this way. It wasn't a spectacular demonstration. It was their daily job—to keep this up without a moment's halt for eight hours a day.

In those eight hours the three ovens, backed by machines which mix the dough, cut it up into loaf-sized pieces, and form these pieces into loaf-shaped bits, turned out 144,000 loaves of bread.

"Give us this day our daily bread," the prayer as old as the pyramids, was answered from Noah's day down to the years of the World War by enslaving hand labor. Now it is answered by giant, electrically driven machines, each with the strength of a million mothers in their steel arms and linked by synchronized motors to capacious ovens baking thirty-five times as many loaves as their pre-war predecessors. Statue by Berthe Girardet, in Detroit Art Museum

The work that these three ovens performed would have required over fifty ovens of the type in vogue until the World War. And those fifty ovens would have been served by an army of men, each one enslaved to a tool known as an oven peel. Working that peel day in and day out through a life-time had shaped its enslaved men to its purposes for their chests grew thicker from rear to front than from side to side, and muscles on their arms stood out until they looked almost misshapen.

The work of these three manless ovens, baking handless, unhandled dough, equalled in this one world capital where I noticed our Most Modern Baker at work, the output of 38,000 home kitchen establishments.

What this post-war revolution in baking means to modern cities is this: Whatever else may happen a bread famine, due to demand outracing supply, is never again likely to be a menace. How recently such a menace did face the modern city we may gather from a glimpse into such a modest meeting as a Grand Army of the Republic gathering in Des Moines, Iowa, held only as far back as 1886.

How to provide bread for the encampment was a real problem. Baking then was a hand process, performed by the sweat of the baker's brow, and the baker was a man who knew his dough and the skill of moulding it into loaves and baking them without burns or poor flavor.

Des Moines bakers, working night and day for four days, failed utterly to provide enough bread for the city's visitors. Housewives, called in to help, also were unable to meet the deficiency. An S. O. S. call to other Iowa cities went out.

In one of them a baker mobilized his whole family. Their oven had to be heated by the bonfire method. They shoved in a fire, heated the brick walls, raked out the fire, and put in the pans of dough. After two batches had been baked and taken out with a heavy loss in burned loaves and "cripples," it was neces-





sary to build another bonfire in the oven, as the brick walls and stone "hearth" had cooled off too much to bake the next batch.

Result—a slow, tedious hand process producing 600 loaves or so for half a day's work. In Davenport a son of a baker mobilized his sons and daughters and for four days and nights they baked for the Grand Army men. They then shipped to Des Moines half a carload of bread, three-quarters of which was already stale!

That's the old picture of the hand-craft. What swept it away was the World War. Ellis Island had sent in an unending supply of apprentice bakers, skillfully trained in all the craft necromancies of Ireland, Germany, France and Italy.

### The Drama of Baking

THESE lads came here ripe for service, and all the baker did was to give them room when he needed an extra "hand." As for the baker himself, he was a cottager, often living above his bakery or behind it. His bread-making bench was surrounded by himself and his family, if he had sons and daughters big enough to work, and the hired hand ranked with the hired hand on the farm.

The family unit bakery scattered 30,000 such plants across America, yet they only baked 30 per cent of the people's bread. For a while it was a contest of arm against arm, cleanliness of hand against hand, the housewife preferred her own hands in her dough to those of a baker she did not trust and of whom she had heard much evil and little good.

The great bakeries, or rather bread factories, each capable of turning out fifty times the output of one of these hand plants, arrested the growth of the neighborhood plants. Thus, today, bakers bake over 65 per cent of all America's baked goods. And yet there are only 5,000 more bakers to bake for all America than there are bakers to bake for the city of Paris alone.

In Paris there are 25,000 bakers; in America, 30,000 that still survive. The "family unit" still exists in Paris—baking is an intimate rite of the folk. Bread is sold at the oven to a "walk to" trade, whereas in America it often finds its way 100 miles from the modern bread factory by motor

truck and 200 miles by fast railroad express.

It really is a dramatic story that lies about the lives of men who lead the baking industry of today, the men who took the world's oldest craft and so changed it that it became the newest babe of Mrs. Machinery.

Let's glance at the change in the background of your loaf of bread as it has affected the lives of just one or two baking devotees.

There's Dent Harrison, baker of Montreal, Canada. When he was a boy in England his uncle ran a crumpet shop, and his first job

his friend's selling talks for a year. Then he succumbed. He got ready for trade—to deliver in volume. Volume came to him. In three years he tore that oven out for a still larger one and wrote it off the books as fully paid for because "it didn't owe me anything." It had "paid for its keep."

His "oven nut" friend, Roberts, lived hard by, as they say among the English. He told him one day of a "nut idea" that he would make an oven that "traveled the bread while it baked." By this time Harrison believed in him. He bought a piece of land—for he was beginning to prosper—and told his friend to set up that new invention. Roberts did. Harrison fired it for a week, after it was completed—and then sent a score of loaves of bread through. They came out in perfect shape. He threw his hat to the ceiling, and ran to the inventor's home, for he had put the bread in four days or so before the inventor had told him to. He had shortened the time for conditioning the new oven. That was the first traveling bread oven in the world.

To the baking industry it's what the Hoe press and the linotype are to the newspaper and magazine. It meant the end of "handset" days for dough, twenty years after they had ended for words in a newspaper or magazine publisher's office.

But the great volume of dough coming from the mixers "piled up" because mixers worked at one speed, the oven at another, and intermediate machines at still others. Dough had to rest half an hour after being made into loaf-sized pieces, just to let the yeast have a final chance to leaven it aright. Where could enough dough sit around waiting entrance to the big oven? Obviously that had to travel too. So they got up the idea of a traveling "overhead proofer." Where should it be? Obviously over the oven.

### The "Oven Nut" Has Another Idea

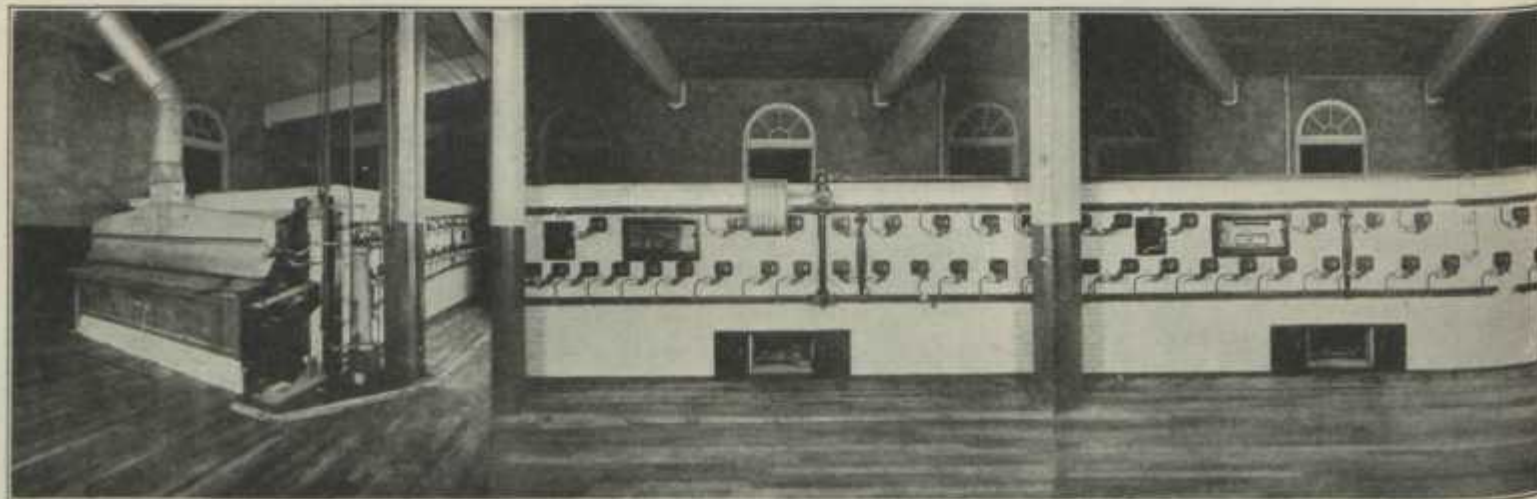
THEN the bread had to cool for half an hour or so before being fit to wrap, for hot bread, if wrapped, retains the moisture of evaporation and becomes moldy. Where could it cool? Obviously it must travel while cooling, too, to keep from clogging the works in heaps. So Roberts, the "oven nut," came to his friend Dent Harrison one day in 1922 with a plan that made many bakers laugh. It

THIS isn't the story of bread, but of a new industry brought forth between sun and sun. Suddenly, in America, bread-making became a mass-production, machine job with the result that approximately the same number of bakers meet the needs of the United States, with its population of 110,000,000, as are required to furnish bread for the two millions of Paris. Wheat used to be 80 per cent of the cost of a loaf of bread. Now it represents only 20 per cent, for bread, formerly baked by individuals, is now engineered by technical institutes, financed by great banks and quoted on the stock market. Thus the world's oldest industry has become, in this country at least, one of the newest and most amazing.—THE EDITOR.

was peddling crumpets. He sold these little cakes from a wagon on a daily route. His uncle was proud and sensitive, and failed to revisit houses whose mistresses had turned him down curtly at one time or another. The boy decided to solicit all that his uncle feared to visit. He felt proud of each new customer, so when a cattle steamer brought him to Canada he had confidence in himself as a crumpet salesman. He got a little oven, a sack of flour, a bit of molasses, and set himself up in business in Montreal.

He thought he was set for life—for a life such as his uncle before him had lived, selling crumpets and making them betimes. But he counted without Steinmets and Hydro—and the times.

He made friends with a "nut on ovens" who proposed to build him one costing twenty-five times what his old one had. He feared he would go into debt for life and fought



Here is the modern bread oven which takes  $2\frac{1}{2}$  tons of dough, prepares and bakes it, and converts it into 6,000 perfect loaves of bread, cooled and ready for the wrapping machines—all within a fleeting hour! From the feeding end, at the left, to the delivery chute, at the right, it measures 125 feet, and because of the limita-

tions of our page, we can show only a part of it. Such ovens as this, introduced in 1922, were the final step in changing bread baking from a neighborhood craft into a big business enterprise, often represented by an investment of \$1,000,000 in a single plant and frequently serving markets 200 miles from the source of production.



was a plan for a three-deck oven, 120 feet long, that would bake 6,000 loaves of bread an hour in its central tier of masonry, proof 6,000 loaf-sized pieces of dough an hour in its upper compartment, and cool 6,000 loaves of bread an hour in its lower compartment before delivering them to the wrapping machines.

What could be done about it? "Build it," snapped Harrison. By this time he had picked up a comfortable competence out of baking and his faith in Roberts, and the Roberts one-deck travelers were going in all over the world.

And so last spring there was completed in Montreal a three-deck oven, proofer and cooler—that kept the dough and bread moving all the time, and backed by other machines almost as wonderful.

#### First Day's Run Is 40,000 Loaves

THESE were the work of Steinmetz—and his synchronized motors. Giant mixers sent steel arms into the dough, each with the strength of a million mothers in their electric muscles. Here was a majestic escape from the drudgery of the doughpan, which had been woman's lot since Mrs. Noah had come off the ark to hear her husband's plea for leavened bread. The mixer worked at the exact speed the oven took the dough, and also at the exact speed the other intermediate machines for dividing, rounding, and moulding the loaves operated. Here was an end to individualism of machines, to anarchy in bake shop governance.

These machines were all set up and out flowed the loaves of bread—40,000 loaves in the first day's run of the revolutionary oven. It was a day for the glory of Steinmetz—and Roberts—and for the new-born baking industry, so different from the ancient craft!

They say people are indifferent to great events that do not vitally concern them. But the women of Montreal were not indifferent to this spectacle of the latest Roberts traveling oven. Dent Harrison wrote me that one night he was two hours in getting into his bakery from the sidewalk. The people had turned out *en masse* to see the revolutionary oven at work. They watched that Niagara of bread flow out, told the folks about it at home—and for two months the bakery was a besieged place.

Dent Harrison, instead of selling crumpets today, is sharing a near-million dollar corporation with his sons. It employs auditors, has a big bank account, deals with finance and public affairs, and conducts fleets of de-

livery trucks. It is a big business of Dent Harrison's town. Thus a baker has "come through."

There are many more that duplicate the story.

George S. Ward in America believed in sanitation—in the bakery that would welcome the people into its midst. He saw the coming day of machinery, sanitation and a quality product such as the hand baker could not produce—because of competing against the unpaid housewife in her home.

Ward had delivered bread by candle light of mornings. He walked Banker's Row in vain, to get money to build the first bakery in America that would be an industrial plant—not a craft shop. All rejected his proposal until one day Andrew Mellon heard his story. To Mr. Mellon goes the honor of inventing bakery finance—or whatever it is you call the process of first letting bakery credits come upon a banker's books. Mr. Ward, with Mellon's money, built a bread factory—a factory fit for Spotless Town. And the people were invited to visit it. A certain distrust of the hand baker disappeared as visitors saw the bakers wearing spotless white gloves whenever they had to touch the dough. It paid. Ward grew and prospered. The banker got his money back.

"Bakery finance" thus came into existence, and bankers looked with favor down the long lane Mellon had opened to them. Gone now, forever, were the days when the nursery rhyme could be sung with a will:

The butcher, the baker, and candlestick maker  
They all jumped out of a rotten pertater.

Ward had a definite ideal of replacing every hand operation with a machine. He did it—to the extreme limits of machine capacity. And soon machines conquered the whole field of baking processes.

Great bakeries arose in Pittsburgh, in New York, in Newark—and bankers would listen in any large cities. So up they went. Paul Stern in Milwaukee insisted on calling his a "bread factory." He resented the craft insinuations lurking around the word "bakery."

In Davenport, William Korn, baker, will be found in every kind of civic activity. He heads the Rotarians—and yet it was only thirty years ago that he had his head buried in a dough trough—mixing, mixing—straining his back to lift dough batches where electric belts now convey them, and dreaming of getting a wagon route instead of the basket route he walked each morning and evening. The

great corporation he heads could make all the bread needed for that Grand Army reunion at Des Moines in half an hour—and it was he who baked for four nights and four days to send half a carload of bread forward when hand craft methods ruled supreme.

Mark Bredin, of Toronto, Canada, visited Pompeii recently and found in the ruins there an oven exactly duplicating one on which he had learned his trade in the north of Ireland. He knows the sweat and labor of baking. Now he heads the \$5,000,000 Canada Bread Company, and after agreeing to write this article I visited its brand new plant in Toronto, where three of these new giant traveling ovens work side by side—electricity doing the work while Mr. Bredin is writing a check to help establish an institute for scientific baking research at Guelph, Canada.

That's the picture of the old and the new in the background of that loaf of bread of yours.

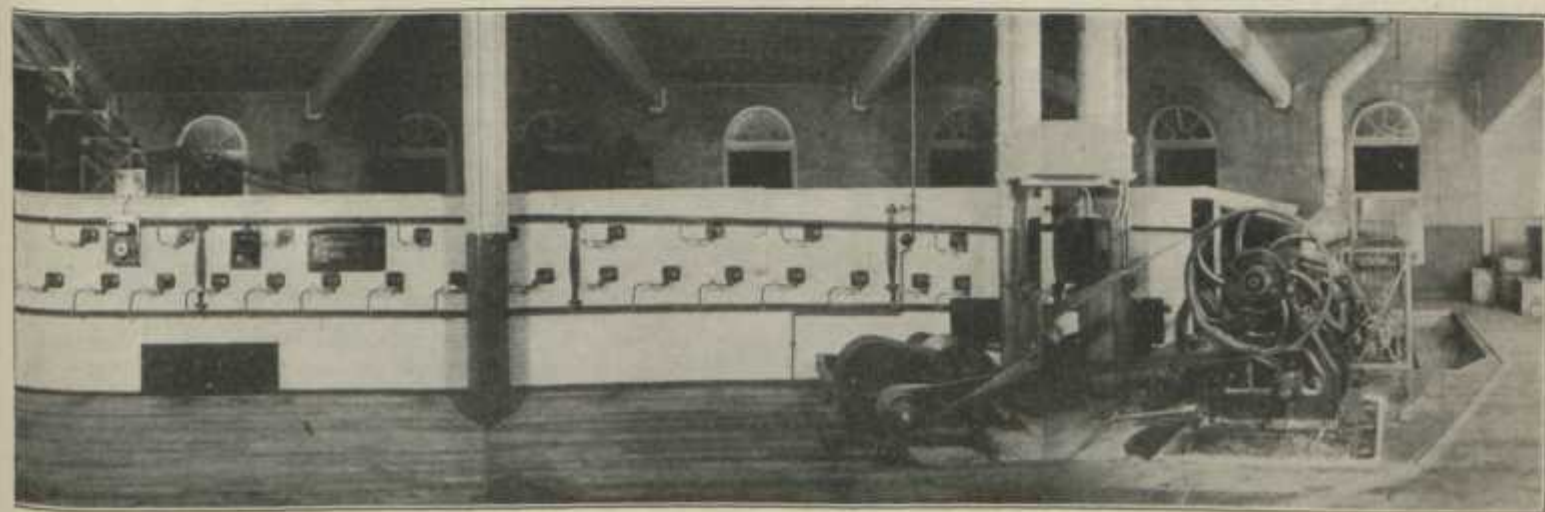
#### Mother's "Bad Luck" Days Ended

LOUIS PASTEUR, father of the fermentation industries, had much to do with the way you can eat your slice of bread—and forget it with no unpleasant thought such as you own up to concerning the bride's bread if you are over forty—but would never own up to as regards mother's bread.

Flavors of bread are made by yeast and if the yeast is weak, or numb from cold while it works, the flavor is "off."

In the old days mother said she had bad luck on such days when her bread was sour, or flat or soggy. Control over all these conditions came with the discovery that yeast worked best at 80 degrees, and that it was essential to build in a bakery, not a mere shelter for workmen, but a plant that could make its own weather regardless of weather outside. This meant fermentation rooms with double walls, refrigeration for hot days, steam heat for cold days, and humidifying machines for dry days. Protected by such a fermentation room, with thermostatic control, all "wild" flavors in bread are brought in leash, and bread comes out the same in flavor today, yesterday and tomorrow.

The housewife knows she could never accomplish this evenness of result. So she bowed to the modern baker. She has bought bakers' bread until the industry, within the decade, has pressed forward from seventeenth to seventh place among American trades. It is organized now with its own Institute of Baking, to teach its own students



Supplementing this modern bread oven are laboratories where bacteriologists give battle to spores and germs, vast storehouses where the floor is properly aged, cork-insulated rooms where the dough is kept at a temperature of 80 degrees and the moisture regulated, and wrapping machines that feed on tons of waxed paper,

the manufacture of which has grown into a large and profitable allied industry. There are, as well, special and ingenious machines for the kneading of dough, machines that take the backache out of baking by substituting electricity for feminine muscles, not to forget large fleets of motorized delivery wagons



how to behave in a modern plant while machinery makes the bread.

And this leads naturally to the price question. All there is to the cry of "bread trust" is that the housewife gladly buys at 10 cents a loaf the modern bread on which vastly more has been spent than was ever dreamed of as necessary on the old loaf. And the housewife will pay this 10 cents for this loaf much more gladly than she will pay 5 cents for the old hand-made loaf in a plant that is a mere shelter for workmen. If it hadn't been for this willingness, the modern industrialization of baking never would have occurred.

Some bakeries have been run to the wall in price fights. I have watched them go—they

were offering the old time loaf in every case, often at half the price of the modern loaf. In the old loaf, flour was 80 per cent of the baker's cost and the slogan ran: "A pound of flour should cost the same as a pound of bread," since the water the baker used added enough weight to make this slogan fair. But in the modern loaf white flour ranks with white paper in the modern newspaper office. From a proud place as the cost leader it has dropped down until it is only 20 per cent of the cost. The rest goes into quality insurance and enriching ingredients that make the modern loaf welcome and appetizing.

Is it any wonder baking stocks have just reached the stock exchanges, and that banks

take note of baking? If you fear there is a trust—remember every woman can get every ingredient of a loaf in any grocery store and her kitchen is all the factory she requires, with the overhead already paid. She has surrendered to a force that holds her by sheer good will alone—the only power the modern baker has to force acceptance of his goods.

As for the hand bakers, the war dispersed the visible resident supply and Ellis Island closed its doors upon them. Machinery men rejoiced as they sold one machine after another—and thus brought upon us suddenly the present Machine Era as a widespread American manifestation in bread making.

## The Pig That Didn't Go to Market

*In which WILLIAM FEATHER tells how he abolished the manufacturer, the middleman, and the retailer—and the dire results that followed*

**M**Y TASTING nerves tingle pleasantly whenever I encounter such words as baked ham, spiced Virginia ham, hickory smoked ham, country sausage, spare ribs, pork tenderloin, rasher of bacon, broiled ham steak, pig knuckles, pickled pigs' feet, or roast loin of pork. The association of these words with "home" or "country" or "Mrs. Smith" is more than my palate can bear.

Although conscious that our nation was making progress, if progress can be measured in iron tonnage and horsepower, yet I had a feeling for many years that certain homely arts had been sacrificed in the movement toward standardization and centralization. For instance, the feeding, butchering, dressing, and curing of hogs; the very thought of quantity production of pork loins and pig knuckles and bacon produced misgivings.

### Back to Home Arts of Yore

**F**URTHERMORE, I was convinced that the modern process of handling a hog from the farm to my ice box was unnecessarily expensive and loaded with the overhead charges of countless middlemen, packers and heavy-handed retail butchers.

I wanted to get back to first principles, to craftsmanship, to the simple economy of the one-man system, if you please. The time came when I was able to satisfy this deep longing and make the great experiment in husbandry and economics.

Three years ago, having purchased a

fifteen-acre farm, I immediately surrounded myself with a complete assortment of domestic animals, including a Guernsey cow, a Welsh pony, a flock of White Rock chickens, a dozen Pekin ducks, and an Improved Chester white pig.

This pig was not a large animal when I acquired it, but it was very ambitious. It was amazingly fond of skimmed milk and the more expensive scientific hog rations, compounded and extensively advertised by the up-to-date millers. Our pig never developed a taste for garbage, for which I rather admired him.

He had a way that caused even the children to feel vulgarly greedy when they asked for a second glass of milk, because they knew that unless the supply was conserved the pig would not get his full measure. He was delighted with the feed sold in sealed bags, prepared under the pure food laws, with the formula printed on the sack in two colors. This feed,

by the way, cost just about as much per pound as the children's oatmeal. We fed him three times a day, with an extra feeding by one of the children whenever he grunted. Of course, he grew. By September his voice was deep and very masculine. I frequently looked at his huge haunches and swelling belly. What ham, what bacon, what loins!

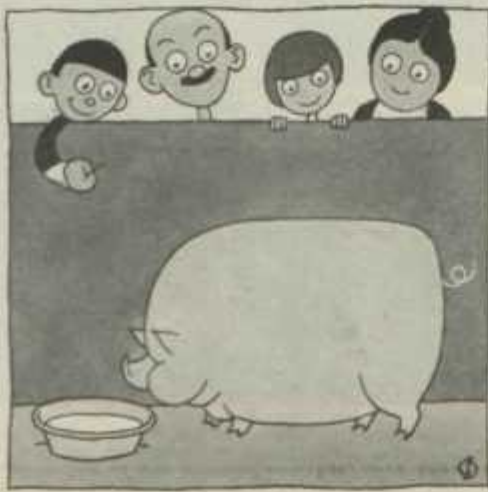
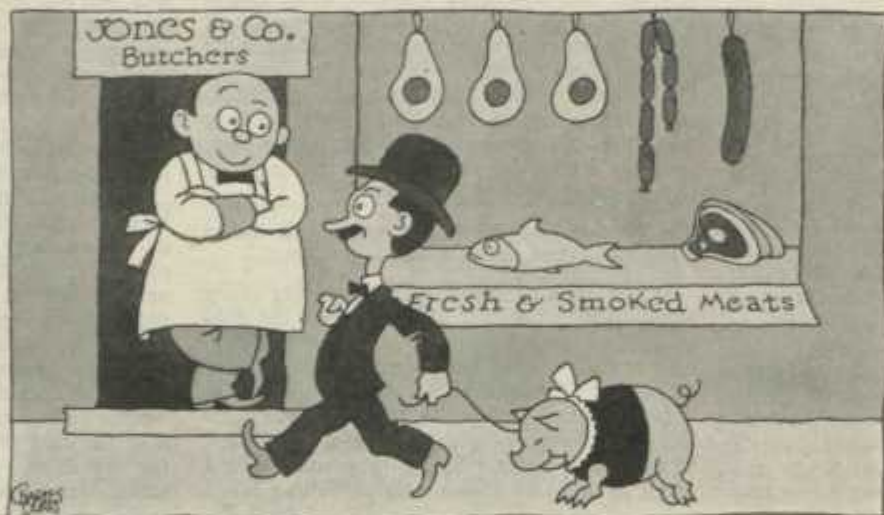
I then made inquiries about the proper time for butchering. We planned to leave for the city the last week in September. I was advised not to butcher until the end of November. This was a great inconvenience, but it seems that home butchering cannot be successfully conducted except in cold weather. Otherwise, I was told, the meat would spoil before I could eat it. So I arranged with a neighbor to feed the pig during my absence, paying him \$2 each week for his trouble.

The family visited the pig each week-end. In the meantime we inquired about methods of smoking, curing, pickling, and rendering. The study of these arts was fascinating, but confusing. It was like asking a half-dozen friends to advise you about the purchase of an automobile.

### Otto Leans to Summer Sausage

**T**O SETTLE the matter, I gave the contract to my nearest neighbor, a big, swaggering fellow, named Otto. He agreed to stick the pig, butcher it, smoke the hams and bacon, render the lard, and manufacture the sausage for the round sum of \$15. He said he would put through his own pig along with ours. We cautioned him that we desired particularly to eat our pig, and not his. Therefore, would he please be careful not to mix them?

Otto, I say, was a bulking man, with a forty-six-inch chest, proud of his strength and his great lung capacity. He was fond of garlic. When he exhaled, even the great open spaces seemed close. Otto, we discovered, was also very fond of sausage, particularly summer sausage and liver sausage, two pork products with which I had but little acquaint-





tance. We explained, as firmly as we could without danger of offense, that we certainly wanted him to make us up a batch of each, but would he please be careful not to put in too much seasoning? Otto smacked his lips, exhaled like a punctured balloon, said he understood, and asked us to wait.

The big day came! I left the office shortly before noon at the urgent request of my wife. I was needed at once. Otto had stuck the pig early in the morning. Several neighbors gathered for the event. I heard there had been a difference of opinion about Otto's technique. Some said the pig had not been bled enough; others that it had been bled too much.

This news was communicated to me, whisperingly, immediately on my arrival at Otto's house. Here I found him in complete command. His kitchen and cellar were piled high with meat and fat. Never did I see so much fat. On the stove were washboilers filled with it. Never did I breathe air so saturated with odors commonly associated with foreign quarters of a city. I was faint. My wife gave me a look which I understood to mean that it was hopeless to protest.

"Where are the loins, where is the lean meat?" I whispered.

"It's all gone into the summer sausage," I was told.

Otto, it appears, could not resist the temptation to show off. All argument had failed. Otto's sausage had been praised beyond the limits of the county, and he was now seeking to extend his boundaries. To him it seemed unimportant that we had promised loins of pork and spare ribs to our friends, and that we had gone without fresh pork on our table for ten days in anticipation of a prolonged feast. He was accustomed to turn all lean meat into summer sausage, and that's what he did.

#### A Feast for Heroic Gourmands

WHEN we left for home that night we took with us several pails of lard, a few scraps of fatty ribs, and a dishpan filled with fresh sausage—country sausage. Otto had everything else—two hams, a dozen chunks of bacon, and endless links of liver and summer sausage.

It seems his gourmandizing did not include plain sausage—the sausage one eats with wheat cakes and Vermont maple syrup. Our fresh sausage had been compounded from a few bits of lean and innumerable chunks of fat and gristle. We ate some that very evening. Everyone was brave. Lack of appetite was attributed to weariness.

Country sausage was served on one or two occasions after that, without comment. Eventually it disappeared. I know not where nor how.

Later in the week we tried the ribs and then a piece of shoulder. None wished to be critical. The venture was what the children call a "project." We all had a stake in it. Responsibility was divided and mutual. However, our pig was obviously very greasy.

I have no idea how long the custom advises that pork remain in the smokehouse. Furthermore, I am not familiar with the smell of hickory logs. At this late date I confess that our home-cured ham

smelled as though it contained a trace of rubber. It was unlike the smell I had long associated with home-cured ham. Otto smoked his meat a long time. We went out each week-end to inspect it.

On our first visit Otto said something that has caused us uneasiness even to this day. When we looked into the dark smokehouse, he indicated the hams and bacon and sausage that belonged to him.

"That's yours over there," he said. No one spoke a word. On the way home a doubt was deftly suggested. Instantly we were plunged into mental confusion and gastronomic gloom.

On a later visit we discovered that Otto had transferred the liver sausage to his attic. It hung on clotheslines. This line was his; that line was ours. Someone whispered, "Let's take ours home." Otto offered neither protest nor approval, so home we took it.

I cannot say that Otto's liver sausage was unfit to eat. We ate most of it. At the end of six months I do not think more than five links of the original twelve were left.

We still had confidence in the hams. They were massive, weighing about 16 pounds each. The first one was served to a group of friends, particularly invited for the occasion, immediately following its release from the smokehouse. The ham was fair. It was half fat and the lean meat was pale pink instead of ruddy red in color. But it was not bad. It was edible, and it was eaten.

The bacon went a little slower. My wife is on a strict diet, and easily resisted its temptation. The children ate sparingly, asserting frankly that they did not care much for bacon. I ate and ate and ate, and finally began to hate the sight of bacon.

I reserve my final comment for Otto's summer sausage. As I have pointed out, it was made from the tenderest and juiciest parts of the hog. It was pure meat, the essence of tenderloin, spiced with strange roots and seeds assembled by Otto from all parts of the world. The flavor of one root dominated the symphony of flavors. One

might say the garlic walked away with the show. This garlic was peculiarly penetrating. It lingered, too. Eating Otto's summer sausage was a rite. One ate it, and was "not home" for twelve hours.

My accounting on the cost of my pig venture is a little vague. Two weeks after I came into ownership of my farm, I discovered that the less interest I took in costs the more I enjoyed the place. Roughly, however, I estimate my cash outlay for my pig was \$52, distributed as follows:

Purchase price...	\$ 8
Feed.....	15
Labor during absence.....	14
Dressing and curing.....	15
	\$52

Our mature pig weighed about 250 pounds, which means a live weight cost of about 20 cents per pound. I realize I have not

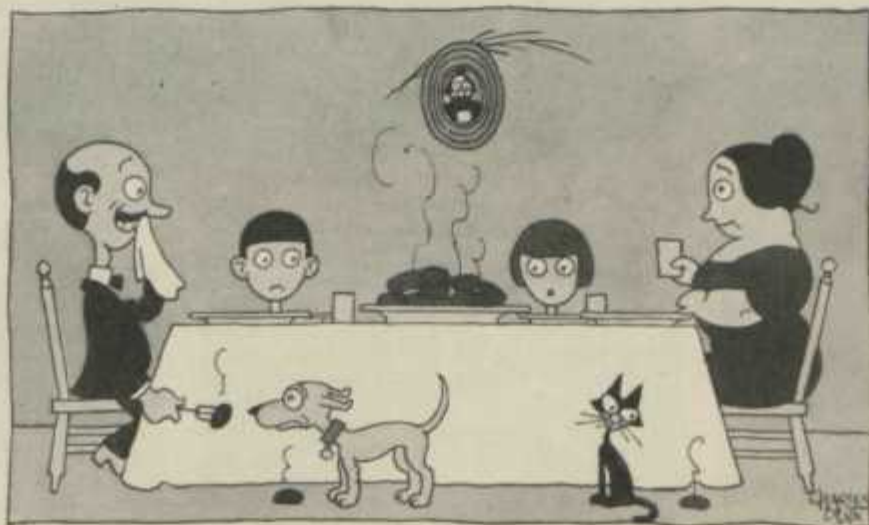
included in these costs the skimmed milk, the wages of the chore boy who fed the pig through the summer, the fee of the veterinarian who called to see the pig one day, interest on my investment, and those other nasty items that are the despair of managers who are trying to show a profit for the board of directors, and amateur economists who are trying to prove the wastefulness of the modern system of distribution.

#### The Stock Yards Vindicated

IN REVIEWING this incident, I am inclined to think there were good reasons for abandoning the one-man method of handling hogs. I can see the line of reasoning which led to the establishment of the modern packing system. Furthermore, I grudgingly admit that the art of curing pork has not degenerated under commercial methods. In my failure to make this case, I admit keen disappointment.

However, I have, as a result, become in a mild way a connoisseur of pork products. I have eaten some delicious hams during the last two years. I have marveled at the delicacy of the flavor, the beauty of the color, and the fine grain of the meat. My breakfast bacon is now a delight—thin, crisp, nutty. The old-fashioned, home-butchered, home-cured pork may have been better than that which now comes to our table from the packing centers, but I doubt it. Certainly, under the old methods the quality was never so uniform as the modern packers have maintained.

The modern system of production and distribution may be unnecessarily roundabout and expensive, but before you criticize it too severely let me urge you to attempt to improve it. I think you will come to the same conclusion I have, that the old way passed out because the new way was better.





Here, on a picturesque road in Yellowstone Park, are just a few of the many automobiles which bring thousands and thousands of visitors to our National Parks each year. Below, the head guide of the riding stables



COURTESY NATIONAL PARK SERVICE, INTERIOR DEPARTMENT

## Our Pied Piper of Parks

By FREDERICK SIMPICH



a sunrise, some goat tracks in the snow, and a bunch of bare-kneed tenor guides in velvet pants and yodel their high-priced hotels full of Yankee tourists every year, why can't we learn to cash in on our own fine scenery that so few Americans ever see?

"You wouldn't look so bad yourself, in velvet pants. Already, you love the parks, and as an advertising man you're the weasel's whiskers! What we need, to put more people through our parks, is some Americanized 'Follow-the-man-from-Cook's' publicity work!"

### From Park Row to Parks

"I ASKED my partners how about it," says Mr. Mather. "They said, run on out west and feed the bears, and sweep out the Yellowstone Park—that the borax business could get along without me."

After this modest admission, my interview with this shy Stephen hit a snag. When it comes to talking of himself, this nature-loving Park Director is about as garrulous as a deaf and dumb Quaker with the tonsillitis.

But for his admiring friends I couldn't have finished this story! They say Lane picked him for the park job because they'd been classmates at the University of California—and Lane knew Mather's peculiar fitness for the hard task.

Mather went to New York, after graduation, and rustled a job as reporter on the old *San*. For five busy years he wrote trade, bank and business news. With an honest face and friendly smile that inspired confidence, he made friends fast; he got inside facts that less tactful investigators failed to uncover.

Then, the borax business! In those days Mather's father managed the eastern office of the Pacific Coast Borax Company, better known as the Borax Trust. He took Steve in. No, I don't mean clear in behind the ground glass—in a big, soft \$200 leather chair. I say in, but I mean barely in—maybe just inside the hall door. But Steve brought his nose along—that famous, Cyrano-like beak that still sniffs big business news from far, far away!

How could even a borax trust keep its secrets from a Wall Street reporter? It

wasn't long till Steve not only knew the borax grip and password—he also knew the trust's customers, and how their business wheels went round. Incidentally, he saw how the trust could sell a whole lot more borax. He drew up a plan for multiplying sales about three times—and, actually, the Big Boys adopted it! And out to Chicago they shot Stephen to sell the world more borax.

He did. Later, using that same nerve—and business nose—that he'd used as a subordinate in boldly telling a powerful trust how to double its business, he calmly cut loose from this fat Chicago job. Into borax, on his own hook! Battles? Plenty! But he knew the tactics of trusts—and he knew borax. In the end, a truce left Mather's own business riding high and handsome. It still is!

But what, you say, has all this to do with parks? Listen. Born in the West, Mather has always gone back to it in vacation time. He loves woods, wild animals. He picks up young bobcats. Bears eat out of his hand. To him, Yosemite was the happy hunting ground—the smile of nature. He came to know its every nook and cranny. He learned the very cry of every coy coyote—the screech of every screech owl.

"He got to know as much about the Yosemite as though he had invented it," writes one of his friends. "He got acquainted with members of the Sierra Club, and they told him about the other parks until he became as familiar with their details as though he had laid them out. Due entirely to his Mather passion for business details, he knew more about all the parks than any other person."

### System With Reverse English

THAT'S why Lane brought his old classmate to Washington, as his assistant, to whip some real system into our then misnamed "Park System."

It was a fine mess. Though park affairs were nominally handled by the Department of the Interior, no special bureau—in fact no particular official anywhere—was charged with the job. Such clerks as now and then wrote a park letter often didn't even know where all the parks were or the size of

**H**OW MANY owls has Uncle Sam? Where do his wildcats spend their evenings?

These things, and other raw materials of national park life and scenery, like loons and lakes, peaks and panthers, geysers and grizzlies—to say nothing of fish and forests, cataracts and catamounts scattered through a score of states and often hidden far from tourist trails—how can Uncle Sam take care of all these varmints, coordinate all this stunning scenery, build roads, camps and hotels, lure his people to frolic in these vast national playgrounds?

Out in Chicago, away back in 1914, Franklin K. Lane put these questions to a borax baron named Mather—Stephen T. Mather.

"Look here, Steve," Mr. Lane may have added, "right now you're drafted into Uncle Sam's service. So drop your borax pick, and turn loose your mule teams. Henceforth, your task is to take our national parks out of politics and put 'em on a business basis. What this job lacks in salary, it'll make up in excitement."

"Why should our tourist armies scatter all their millions overseas, when right here in our own backyard we have scenic set-ups that make much of Europe look like the city dump on a rainy day?"

"If the Swiss can take a piece of cheese,



them. Again, in those days each park was handled separately. If one park had too many bears, buffalo or armadillos, could this surplus menagerie be transferred to another less populous park where eager tourists pined in vain for even a glimpse of one of these creatures? They could not! Where in the holy Regulations was the authority for staging any such Noah's Ark joy-ride at government expense—?

It was so with park employees. Those hired by the year for work in one park could not be sent to another; or, if one park had a surplus of tools or supplies, and a second park had a shortage, there was no way of transferring these things to the spot where most needed.

Mather's first step, on reporting for duty, was to plan a National Park Service. Congress backed him up with the necessary law. It united the then twelve parks and eighteen national monuments into one system, under a central administration. Since then, due to Mather's tireless efforts, seven parks and eight more monuments have been added, giving the Park Service jurisdiction over 13,190 square miles of territory.

#### Admits Motor Cars

THESE parks are everyman's playground, Mather insists. One of his big aims, from the very first, has been to make them easily accessible to those of small means. The man who can buy a \$5,000 suite on the *Belgenland* for a world cruise will come to the parks anyway. For school teachers who come west by train, the thousands who swarm the highways in Fords and Dodges, park trips must be simple and inexpensive. One of Mather's first steps was to open the Yellowstone to motor traffic, letting the tin lizzies roar in delight where for so long only horse-drawn vehicles were allowed.

To put more people through the parks, Mather early saw that more and better roads were needed. Today one of the most popular of all motor trips is the ride over the famous Tioga road, running from Lake Tahoe down to the Yosemite. But when Mather started his work, he found this road was owned by a mining company. Plainly, a trail through such scenes of natural beauty should belong to Uncle Sam, but no funds were in sight with which to buy it.

Did he sit down and weep because Congress wouldn't buy him that pretty road? Nary a tear. But action! Joining with another park lover, the two bought the road for \$15,000 and quietly gave it to Uncle Sam. His own modest version to me was that "private individuals bought the road, and turned it over for the good of the park system." It

was the same way when the Yosemite rangers needed a new club house. Congress failed to come across with the necessary \$26,000. Yet, somehow, that club house began to go up! On Christmas Eve the rangers, frolicking about their Christmas tree, found a mysterious envelope hanging on it. Inside this envelope was a deed, wherein one Mather conveyed a new club house to park employees.

But, unless you want to stampede Mather, don't ask him about these things. It makes him nervous—even wild. If you're tactful, he'll talk gaily for hours on the value of parks to civilization. He'll tell funny stories about the splendidly efficient men who are

cars. How did he get such results? In these ways:

**Advertising**, using the same lively methods that have made Nice, Monte Carlo and Ostend famous. He induced western railroads to help with cash. Their newspaper and magazine publicity featured the charms of the parks, their new roadways, hotels and camps. Each season, additional tens of thousands are being educated to vacation in the parks. This year, in answer to inquiries, Mather's office mailed out over half a million pieces of printed matter.

Next, Mather turned all hotel, camp, transport and other such park enterprises over to

private business operators. He took government clear out of this business, yet kept supervision of it, and so fixed it that a fair share of all profits accrue to Uncle Sam.

Then, **roads**. Steve knew he couldn't attract and handle bigger crowds—no matter how beautiful the parks might be or how strong their appeal—unless he had smooth roads that would make the scenery easy to see.

#### Fair Prices Rule

FOR A small fee, those who come in their own cars simply drive in and stay as long as they like. To handle the thousands who arrive by train, reliable concerns are licensed to operate cars and busses at fixed fares.

Discussing these bus, hotel and other operators, Mather says: "Many small licensees, operating under permit in different parts of a park, often with friction among themselves and offering no promise of efficient, coordinated service for our increasing number of visitors, have had to be superseded by larger organizations—well financed and capable of expanding their equipment as needs arise."

Not only the hotels and transport lines, but the camps, cafes, bath houses, photographic stores, etc., are all operated—under permit—by private interests. But all are subject to strict supervision, to see that the public gets the best service at fair prices.

"It's hard to realize that this park is really government property," one tourist told me. "Instead of feeling like an interloper, one feels that he's part

owner of the park, and therefore anxious to observe the simple rules for its preservation. Out here, every tree, flower and wild creature is safely protected, yet you don't seem to sense that 'Verboten' air that hangs over so many institutions in Washington with their everlasting 'No Admission' signs.

"And you don't have to spend a lot of



PHOTO BY HANSFORD STUDIO, COURTESY NATIONAL PARK SERVICE, INTERIOR DEPARTMENT

Looking toward Mount Rainier from Inspiration Point showing the automobile road that terminates in Paradise Valley at an altitude of 5,557 feet. Before Director Mather opened the National Parks to the motor car and built highways on which motorists could travel with ease and safety, the six-horse Concord coach, shown above, was the most popular means of transportation in Uncle Sam's scenic wonderlands

working with him, and how their businesslike handling of tourists and the operators who run the park utilities are building up patronage.

The year before Mather took this job, park tourists numbered only 235,000. Last season, 1,493,712 people visited the parks and national monuments. Over sixty per cent of these visitors drove through in their own





Stephen T. Mather, National Park Director, at the right, stops to chat with Superintendent "Dusty" Miller of the Yosemite National Park

money. If you find the big hotels too high-priced, you can go to the camps, sleep in a tent and eat in a cafeteria.

"A plumber from Des Moines, coming in his flivver, gets the same courtesy as a Denver banker in his Rolls Royce. And they handle traffic on one crowded road in the Yosemite with all the snap and safety of Fifth Avenue and its block signals."

It is impossible to say, of course, what these parks are worth, in mere dollars and cents, to Uncle Sam. The actual land and forests have been variously estimated at a hundred million dollars and upwards. But no one can even guess what they're worth in health, happiness and outdoor recreation to us, and to the millions of Americans yet unborn.

Plainly, however, Mr. Mather's job, as the head-master of these big playgrounds, is one of unique yet grave responsibilities. It took big brains to peddle America's borax output; but it takes more to move this myriad tourist army happily and comfortably through these rough, wild regions.

#### Keeps Only Efficient Men

**U**NDoubtedly, one of the chief reasons for Mather's big success lies in his ability to pick men. Only the fit survive in his company. No other government staff assays more efficiency than the park service. When Charles Allbright, Superintendent of the Yellowstone and a typical member of Mather's picked band, for example, was testifying before a House Committee on park matters, he fairly knocked them over with his grasp of park questions. From Maine to Alaska, from the Grand Canyon to the Kilauea crater, he knows every nook and cranny of the parks, and their legislative needs.

I asked Mr. Mather for some high lights on just how this big park job is done.

"We make contracts with individuals, and with companies," he said, "so that private capital installs the needed facilities. These contracts rigidly protect the government and the public. They provide that the hotel, the

camp, the auto line or other enterprise shall be run and kept up in a safe, adequate way, satisfactory to the Secretary of the Interior—and the tourists.

"Any man, licensed to operate a business in the parks, makes his contract knowing that Congress intends that the park shall be preserved in its natural state, that no private interests are allowed to operate in it except for the comfort and convenience of visitors.

"Every operator must agree not to commit any waste, or to mar, alter or destroy any timber or mineral deposit, or any natural curiosity, or to injure any of the birds or wild animals.

"There are of course many other conditions, all of them fair, which operators must observe. For example, no service to tourists can be charged for at more than the regular tariff

of rates and fees as approved by the Secretary of the Interior.

"In return for these permits to operate in the parks, the government is paid each season a sum determined by a flat percentage of the gross receipts; or, occasionally, the government's share of an operator's receipts is set on a sliding scale. Under this plan, private operators have invested about \$14,000,000 in providing park utilities for the use of tourists.

"Our park work is divided into four major parts—Administration, Protection, Maintenance and Improvements.

"Administration includes supervising the hotels, camps, bus lines, etc., and educational activities such as museums and guides. Also, of course, we oversee all government expenditures.

"Protection involves the care of the tourists, enforcement of traffic and sanitary rules, caring for wild game and saving forests from fire and insect pests.

"Maintenance calls for road, trail and bridge up-keep, as well as repair of houses and other equipment.

"Improvement concerns planning and building new roads, trails, houses, etc. Such things must first be approved by our landscape engineering force, so as to blend into a carefully considered scheme of maximum beauty and

minimum interference with natural conditions.

"Appropriations have, in a measure, been sufficient for these four phases of our park work, but due to the need for strict economy in all government activity, our improvement projects have had to be deferred. In making park roads safe for motorists, our program has had to fall behind. This, in my opinion, has been false economy, because it has increased maintenance costs for which no permanent return is secured.

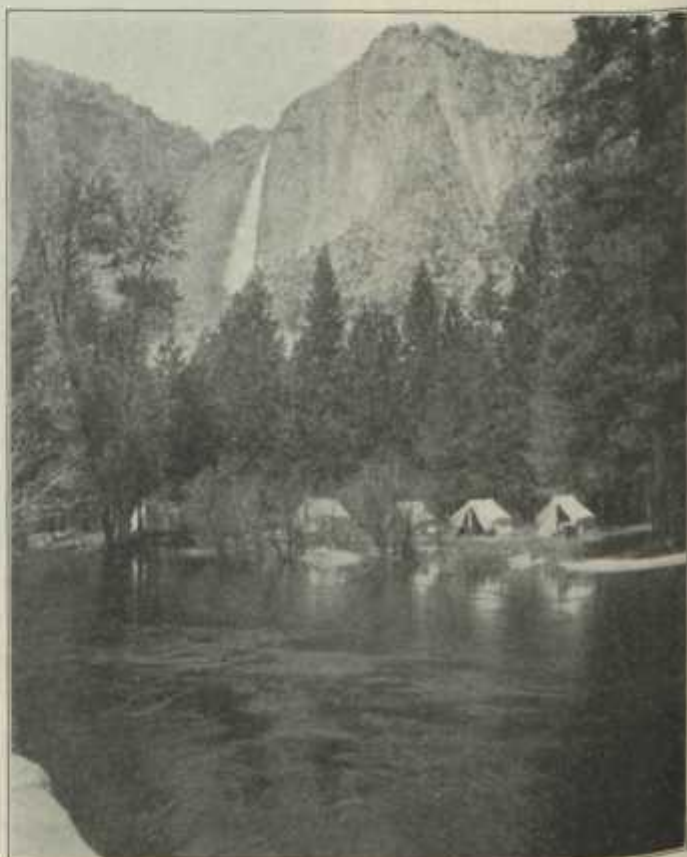
"In my administration of the national park system I have worked towards putting the parks on a self-sustaining basis. It is only fair that those who use the parks should pay a part of their upkeep.

"Uncle Sam received in revenue from the parks, in the fiscal year 1924, the sum of \$663,886.32. In five years, I think the parks should be returning a revenue of a million dollars a year, especially if roads are improved for motor travel in accordance with the program now authorized but for which funds are not yet available.

#### Roads Pay Biggest Return

**I**MPROVED roads will certainly stimulate park motor travel, and from this patronage much of our revenue is derived. But the use of the park roads is not all that visiting motorists receive in return for the modest fee charged. Camping spaces at the big public camping grounds are provided free. Motor tourists also are provided with firewood, cooking places and—at some points—with tables and benches at no cost. In these camp grounds adequate sanitation has been installed and pure water has been piped to convenient points.

"The government itself, in the operation of these big camps, has become a great resort keeper, for the number of visitors bringing their own equipment and 'camping out' far exceeds the number who use the hotels and permanent camps. Yet these latter enter-



COURTESY NATIONAL PARK SERVICE, INTERIOR DEPARTMENT

A public camp in Yosemite National Park where firewood, cooking facilities, benches and tables are furnished without charge



prises have vastly expanded to meet their growing business.

"These parks prove, also, to be a great economic asset in drawing settlers and investors on their first trip to the West, thereby helping build up and bring permanent prosperity to this region. Also, they bring a great flood of tourist money into the states where they are located. It is said that this year's travel of park visitors has meant the distribution of perhaps more than \$500,000,000 throughout the country. On this subject, one writer says: 'The really great value of tourist travel to the entire West lies not alone in the money that visitors expend for daily living and amusement, but in the information they gain regarding agricultural, commercial, mining, and industrial opportunities; in this manner the parks, in drawing tremendous tourist travel to the West, are playing a big role in the economic development of the Nation.'

"Yet their value as melting pots may be even greater.

"In the evenings, about the camp fires, you will meet people from the four points of

the compass, from widely separated regions of our big country. People will be there from all walks of life, from every trade and profession. This breaks down barriers, prejudices and misconceptions of the other fellow, or the state from which he comes. This mingling, on a common footing in a spot of great natural beauty in which all claim common ownership, is bound to result in broader minds and

better citizenship, in happier outdoor life and better Americans."

It was a lucky day for you and me when Lane told Mather to drop his borax pick.

Supplying pack horses to visitors wishing to see the glories of the Yellowstone from the saddle is a recent innovation in National Park service. Here the train has stopped for a view of Heart Lake



COURTESY NATIONAL PARK SERVICE, INTERIOR DEPARTMENT

## The Farmer's Money—Will He Spend It?

By O. M. KILE

Author, "The Farm Bureau Movement"

INCREASES of a billion or a billion and a half dollars in the farmers' income for the current year are fairly common estimates—as we read the newspapers of recent months. And they make very pleasant reading, too. The business man can mentally picture the share of that billion or so that will eventually pass into his own pocket and it makes the world a lot brighter. In fact, a good many are rather inclined to resent any statements or obtrusion of cold figures that might tend to awake them from their rosy dreams.

Still it is safe to assume that any business man, who has continued to remain in business for any length of time, has learned long ago to look facts in the face. He wants to know exactly where the farmer stands today as compared with last year and with pre-war times; how much purchasing power the farmer has; how it is distributed.

It may be said at once that farmers as a group are considerably better off than last year, not only by reason of the increase in gross income amounting to something like half a billion dollars, but also because of a slight decrease in the prices of commodities the farmer must buy. It should be added, however, that most of this increase in crop value is concentrated in four western wheat states—North Dakota, South Dakota, Nebraska and Kansas; three cotton states—Georgia, Alabama and Mississippi; and two combined grain and cotton states of Oklahoma and Arkansas.

Most of the corn belt states show slight

decreases in cash income as compared with last year and the Pacific coast states all show material losses. The apparent decreases in Texas and the Carolinas are mainly due to comparison with the exceptionally profitable cotton crops in these states last year. In the same way the phenomenal gains shown by Georgia, Alabama and Mississippi are largely due to comparison with the very poor crops of last year.

To a very large extent we must look for increases in farm income in the total value of the wheat, oats, corn, and cotton crops. To be sure, cattle, hogs, dairy cows, and poultry are responsible for nearly one-half the total farm income, but the actual profits derived from these sources are usually reflected rather closely in the prices of corn and oats, since these grains are marketed very largely via the livestock route.

Estimating on this crop basis I have prepared the balance sheet in the accompanying box, using October government crop estimates and farm prices, except where otherwise noted. The extraordinary period of warm dry weather throughout October matured more corn than was thought possible at the time, but the increased yield was promptly reflected by a decline in price, so that the October 9 values are still fairly accurate.

This counterbalance between the corn crop

and price illustrates very well how completely the corn market is on a home consumption basis. In the same way the balancing of price and yield on the cotton crop shows that this year, at least, American cotton sets the world market. Average prices at the farm are used in all instances in making the calculations.

The barley, rye, potato, tobacco, hay and fruit crops are ignored, both because of the fact that they do not run into large totals, comparatively speaking, and because of the further fact that such gains as have been made this year by barley and rye have been about balanced by losses in total income from the tobacco and fruit crops. Potatoes yielded a larger crop this year but the price is materially lower. There is a moderate gain in the total value of the hay crop as compared with last year.

The final showing, then, as compared to last year would be roughly as follows, although it must be understood that further comparatively slight changes in prices per bushel or per pound might materially alter the total. Furthermore, the final actual value of the corn and oats crops depends very largely upon the prices of hogs and cattle during 1925:

Gains		Losses	
Wheat .....	\$262,292,000	Cotton .....	\$51,194,000
Oats .....	216,739,000		
Corn .....	51,330,000		
	\$530,361,000		\$51,194,000
Net gain over 1923 .....			\$479,167,000

This half billion dollar gain may be disappointing to some, but it is a very respectable



percentage of increase when we recall that the total farm value of all crops (not including livestock), for the year 1923, is placed by the Department of Agriculture at only \$6,947,000,000.

Now what will the farmer do with this increased income? What kinds of goods will he buy first? Will this new money pass into channels of trade quickly or slowly?

This increased income means different things to different farmers, of course. A few North Dakota, Montana and Kansas farmers will be able to not only clean up their debts and stock up on current needs, but to buy luxuries, if they so desire.

It is not likely that many will plunge on luxuries, however. The value of a cash reserve has been too painfully learned during the past few years to be forgotten for a year or two at least. Furthermore, the demands of present creditors will hold the majority of northwestern farmers in check. Farmers in the Pacific coast states and a few other spots will, no doubt, have to curtail their purchases somewhat.

But the great bulk of the farmers all through the Midwest, the East and the Southeast will simply jog along much as usual, but feeling a bit easier than last year. They will pay off a debt here and there, increase their bank accounts a trifle, probably replace the four-year-old overcoat and the out-of-date bonnet, buy a new farm implement or two, maybe a new carpet or living room stove, and a few will retire the faithful old flivver in favor of a brand new car.

#### Plan Comforts and Conveniences

SOME who own good farms clear of debt have not been particularly hard pressed except for trebled tax payments. They have made no profits, but the mere interest on the large capital invested has brought a fair living. Many of these owners will seize upon present better times as the opportunity to buy the long-wanted electric lighting system, to install a running water outfit and a bathroom, or to build an addition to the house.

It is not likely that the dairy farmer will spread himself particularly this year, since his business does not show the same relative advantage over other lines of farming that it has enjoyed since 1921. Still, he has fared very well and in most cases saved a little money.

In the South and in portions of the East and Midwest some farmers will begin to build up their soil fertility losses of recent years through heavier purchases of fertilizer. High prices for crops at the time of planting are almost certain to result in larger use of fertilizers.

The large mail order houses are already feeling the effects of increased farm buying. They are usually first to reflect changes in the farmer's buying attitude, but manufacturers are finding that the farmer is not going to rush into any buying spree. How can he? A half-billion dollars sounds like a lot of

### Crop Values As Compared With Last Year

#### WHEAT CROP

1923	1924
786,000,000 bu. @ .91c = \$715,000,000	856,000,000 bu. @ \$114.2c = \$977,552,000
Gain over 1923 = \$262,292,000	

#### CORN CROP

(October 9 report on yields and "new-crop" prices; average of November, December, January, February for last crop and December futures for present crop.)

1923	1924
3,046,000,000 bu. @ .75c = \$2,284,500,000	2,459,000,000 bu. @ .95c = \$2,336,500,000
Gain over 1923 = \$51,550,000	

#### OAT CROP

1923	1924
1,300,000,000 bu. @ .38c = \$494,000,000	1,509,000,000 bu. @ 47.1c = \$710,739,000
Gain over 1923 = \$216,739,000	

#### COTTON CROP

(September 15 yields; average of September 15 and October 1 prices for 1924; predominating prices for 1923.)

1923	1924
10,129,000 bales	12,596,000 bales @ 22.2c = \$1,398,156,000
80% @ .30c per lb. = \$1,499,350,000	
20% @ .28c per lb. = \$1,100,000,000	
Loss as compared with 1923	= \$101,194,000
Extra value of cotton seed 1924	= 50,000,000
Net decline on cotton crop	= \$51,194,000

money, but it is only about \$75 per farm when you stop to figure it out. It will take several years of net returns as good or better than the present year to induce the farmer to actually go at it and build up his farm to the pink of condition.

Just think for a moment what a tremendous total of equipment the farmer is going to require during the next ten years to maintain his plant and at the same time make up for present deterioration. Here are a few of the items based on rough estimates made by economists of the United States Department of Agriculture:

millions of new gas engines and power appliances; millions of tons of cement; and millions of tons of fertilizer must all be purchased.

Part of this expenditure is, of course, chargeable to current upkeep, but the greater share and the most pressing requirements are due to the three to four years of short buying during the hard times period now happily drawing to a close. Scarcely a foot of lumber, gallon of paint or piece of equipment has been bought that could be done without.

For several years the abnormally large number of farm auction sales has been the chief source of replenishing the equipment and machinery needs of the neighboring farms. Reaping and mowing machinery has been made to do double duty by harvesting larger areas. Today the number of farm auction sales has dropped off sharply and the local blacksmith has about reached the end of his ability further to patch and repair.

#### Farmer's Dollar Buys More Now

BUT the farmer is in no hurry to plunge into this replenishment job. He has had his fill of overhanging debt. There is no shortage of bank and store credits, but the average farmer now hesitates to go into debt for equipment. There will be much less installment plan buying in the next year or two. The farmer has an amazing ability to do without—when he sets himself to it.

The half billion dollars more that the farmer will likely have on hand to spend this year than last should make a start in this program of rehabilitating American farms, but it is only a start. It will take years of extra-capital expenditures in most states to get back to normal.

It is the down-swing tendency in prices of other commodities that will help the farmer quite as much as better prices for his crops. During the month of August the purchasing power of the farmer's dollar, when measured in terms of other commodities, rose from 83 per cent of pre-war times to 90 per cent. By October 1 some of this advantage was lost but the index figure still stood at 87. This is a tremendous gain over a year ago when the purchasing power of the farmer's dollar was listed at only 73, but readjustment is not yet complete.



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# Making a Town by Working Together

By RUEL McDANIEL

**K**INGSVILLE, TEXAS, has learned a lesson in cooperation. What's more, Kingsville has put its knowledge to practical usage.

Founded in the spring of 1904, when a lone lumber yard was established on the mesquite-pitted prairie, Kingsville has grown from a dot on an ocean of grass to a city of 6,000. There was no railroad when the place was founded, but one was coming. On July Fourth of the same year the first train hit what is now Kingsville. The land granted to the railroad by ranchers as a bonus for directing the line through Kleberg County was cut up for farming purposes and sold with the understanding that it would be settled by home-owners.

Cotton quickly became the money crop. Each year saw a new record in point of production. But like other communities depending on a one-crop plan, farmers and business men found themselves cotton-poor. Lack of diversification plainly retarded the growth of Kingsville.

Some one suggested dairying as a remedy, but where was the market for dairy products, and where the creamery to handle them? To answer these questions members of the Commercial Club organized the Kleberg County Dairy Association, made up of both farmers and business men.

## Creamery Pays \$11,000 Bonus

**T**HE NEXT step was for farmers, bankers and store-owners to build a creamery. The Dairy Products Company was incorporated with a capital of \$3,500, and in a comparatively short time the creamery was in operation.

The charter provided that the stock should never draw more than 8 per cent in dividends per year, that 8 per cent of the capital should be set aside each year for depreciation, that a small amount of the profits should be set aside for a surplus, and that the remainder should go to the producers in the form of a bonus.

Last year the stockholders drew their 8 per cent dividends, as they have done since the plant has been in operation; the depreciation was written off; a considerable sum was put aside for the surplus fund; and the producers divided \$11,000 among them as a bonus—this in face of the fact that Kleberg County dairymen received the highest price paid for butter anywhere in the state of Texas. The capital stock, too, is \$20,000 now as compared to \$3,500 in 1913.

During the first year the creamery operated, the monthly receipts of butter fat ran from 8,000 to 12,000 pounds. The present receipts run to 500,000 pounds and more.

The company sells butter at top price all over south, east and north Texas; and its market reaches over into border states. It distributes ice cream over a territory that is equal to any three New England states. The creamery output in Kleberg County now exceeds the cotton crop in value. Cooperation did it.

As the soil around Kingsville was espe-

cially favorable to cotton, the production of the staple continued to mount, even though other industries sprang up.

The Commercial Club, which is composed of farmers and business men alike, concluded that if farmers were to get the best returns from their cotton crops, they should mill it as well as grow it. Accordingly, they came to a decision that Kingsville must have a modern cotton mill.

The industrial division of the Commercial Club was notified to perfect plans for the raising of capital and the erection of the mill. After considerable investigation the committeemen concluded that the mill should start with not less than 2,500 spindles and that it would require \$250,000 capital to put the project into operation.

The club voted on the report favorably, and the chairman of the industrial division appointed twenty-one members of the club to sell the stock necessary for the mill. In a little less than two weeks Kleberg County farmers and business men raised the money.

That was in 1921. Today the Commercial Club and directors of the mill, who, by the way, serve without salary, are discussing plans for increasing the output of the plant. It now employs more than 200 people, and the project is an assured success.

Kingsville citizens realized that if their town were to progress as they would like to have it, newcomers must become home-owners. So the community provided a means for people with limited capital to acquire homes. They organized a building and loan association, capitalized at a million dollars. The majority of the stock is owned locally, and the capital was raised by the Commercial Club much in the same manner as the capital for the cotton mill. Today a man need not have money in order to own his home in Kingsville, and renters are the exception rather than the rule.

Until the latter part of 1918 the town had no natural gas supply, although indications were that natural gas and oil, too, were there. It was impossible to interest reputable oil and gas companies in a purely "wildcat" project when there were proven fields lacking capital to drill.

The late C. H. Flato owned leases on about 12,000 acres of land in the county. He tried to induce several oil companies to drill for either oil or gas on his land, but without success. Finally as the demand for cheap fuel increased, he proposed to the Commercial Club that if a local company would raise

\$100,000 for drilling purposes, he would donate 4,000 acres of his leases to the organization as a bonus.

Once again the industrial division got busy. In a few days the necessary \$100,000 capital was assured, and a company was organized. The first well blew in with a strong flow of gas. From that day to this it has supplied ample fuel to Kingsville at a reasonable rate.

The company then began drilling a well for oil. Before the second well was brought in, a well-known Texas oil company offered an attractive price for the local concern's holdings. They sold out with the understanding that the buyers should develop the oil and gas fields in Kleberg County.

For a long time the town was without adequate hotel accommodations. The Commercial Club decided to build a hotel that would be a credit to the community. Accordingly, they raised money and constructed a modern, three-story stucco building in mission style that would add to the beauty of any city. The cooperative concern operated it long enough to prove its worth as an investment, and a hotel organization came along and paid the local company an outright purchase price.

The most recent cooperative movement on the part of Kingsville citizens was their work in locating the South Texas State Teachers' College there. Ten years ago the Commercial Club concluded that Kingsville ought to have one of the three new state teachers' schools that the Texas legislature had voted to establish. This fall Kingsville's dream of ten years' duration will become a reality.

## Commercial Club the Hub

**T**HE FIRST unit of the school buildings to be constructed was the president's home. The legislature appropriated \$10,000 for this purpose. But of all the plans submitted for the home, none called for a building that could be constructed for less than \$15,000. Kingsville citizens reached in their pockets, through the aid of the Commercial Club, and donated the other \$5,000.

All of Kingsville's cooperative activities revolve around the Commercial Club, which is an unique organization in several respects. A man does not have to be a merchant, a banker or a professional man to belong to the club. The chief requirement is an interest in the upbuilding of Kingsville and Kleberg County.

The membership is not confined to citizens of Kingsville; farmers all over the country are active members. They work with the club through their suborganizations.

The organization is governed by a board of thirteen officers and directors. Here's a

recent and typical directorate: a druggist, who also is a physician and member of the school board; a laundryman; a railway engineer; a farmer, who also is a bank director; another farmer, who deals in real estate as a sideline; a dairyman, who holds the office of county judge; an official of a commission house; a merchant; and a third farmer.



Kleberg Avenue, the "Main Street" of the town cooperation built



# Old As the Hills Is State Regulation

By JAMES E. BOYLE

*Professor of Rural Economy, Cornell University*



"By the statute of the 8th of Elizabeth, the exporter of sheep, lambs and rams was for the first offense to forfeit all his goods forever, to suffer a year's imprisonment, and then to have his left hand cut off in a market place upon a market day."

**Just As We Laugh Now at the Statutes of 350 Years Ago, So Will Old Man Economic Law Smile at Our Legislative Antics Four Centuries Hence**

## *Part I—English Wool Versus Indian Calico*

IT MAY be small comfort to the American business man to know that his government, in "regulating" him, is giving him no new medicine. Regulation, price-fixing, control of markets by law—all these are as old as industry itself.

If there is any human being that stubbornly and successfully resists regulation, it is the Englishman. But even the Englishman was formerly subjected to a regimen of governmental regulations, both petty and great, compared with which our present regulations are mere dust in the balance. Take one concrete example—the wearing of woollen clothing. In substance, his government said to him:

"You shall wear wool. And if you will not wear wool when you are alive, then,

damme, you shall wear it when you're dead."

The story of English wool is a fascinating one, covering four hundred years of stirring history. Condensed in its simplest and briefest form, this story runs about as follows:

Wool for four centuries was the pet industry of England. Laws were made to prohibit the wearing of the beautiful Indian calicoes. Yet the ladies and gentlemen followed the whims of fashion, then as now. Fashion, fickle as it was, proved more potent than political statutes. We must go to the old chronicles to get the true picture of the people's dress styles. By far the ablest, the quaintest and the most interesting of these chroniclers is Holinshed. Writing away back in the time of Queen Elizabeth (1577), he

gives us some peppery comment on the fickle styles of his day:

... the phantastical folly of our nation (even from the courtier to the carter) is such that no form of apparel liketh us longer than the first garment is in the wearing, if it continue so long, and be not laid aside by the fickle-headed tailors, who covet to have several tricks in cutting, thereby to draw fond customers to more expense of money. . . . And as these fashions are diverse, so likewise it is a world to see the costliness and the curiosity, the excess and the vanity, the pomp and the bravery, the change and the variety, and finally the fickleness and the folly, that is in all degrees, insomuch that nothing is more constant in England, than inconstancy of attire. . . . In women also it is most to be lamented, that they do now far exceed the lightness of our men (who nevertheless are transformed from the cap even to the very shoe), and such staring attire as in time past was supposed meet for none but light housewives only is now become a habit for chaste and sober matrons. What should I say of their doublets with pendant codpieces on the breast full of jags and cuts, and sleeves of sundry colours? . . . Their fardingals, and diversely colored nether stocks of silk, Jersey, and such like, whereby their bodies are rather deformed than commended? I have met with some of these trulls in London so disguised that it hath passed my skill to discern whether they were men or women.

The ups and downs of the "pet industry" of England are best pictured in the quaint words of the merchants, politicians, and writers who actually saw these vicissitudes with their own eyes. Let me present the story, therefore, largely by quoting the original documents.

A poetic London writer of the seventeenth century called wool the "Golden Fleece of England." A gentleman who signed himself "W. S.," writing in London in 1656, used these strong words: "Wool is the Flower



and Strength, the Revenue and Blood of England." John May, a Deputy Aulnager, writing in London in 1613 on "A Declaration of the Estate of Clothing now used within this realm of England, etc.," refers to the *Wool Sack* in the House of Lords, as a "customable use" which "has always been observed." As early as the reign of Edward III (1337) a law was passed prohibiting the export of wool under penalty of death. At the close of the sixteenth century the export of any wool was absolutely prohibited under penalty, and to prompt their vigilance in preventing such exports, the judges, King's Council, and Masters in Chancery were seated on wool sacks.

Even Josiah Child called wool the "Foundation of the English Riches," and declared that all possible means "ought to be used to keep it within our own Kingdom." It was easy and natural for the lawmakers to conclude that England's prosperity depended upon the wool industry, and therefore all English subjects should wear wool, willy-nilly. By the same token it was deemed wise to force Ireland to throttle her own wool industry, for Irish wool and yarn came to England to depress prices.

The subservient Irish parliament acceded to the "request" from England, and no more wool left Ireland, except the liberal amount smuggled out. A "Tract concerning the present state of Ireland, wrote in England, but first printed in Dublin, 1729,"

contains the naive but prophetic statement, "It is a received Opinion, that it were better for England, if Ireland were no more."

"Wear wool," said the English law, and the English people, both high and low, did wear wool, with perfect content. That is, they wore wool till something new came to their attention, and the new cloth was calico. It was the bright colored, thinner, cooler Indian calicoes that caught their fancy. The cotton industry in India was in a high state of perfection three thousand years ago, and perhaps long before that. Fine fabrics were made there a thousand years before the Romans invaded Britain, when the Britons wore skins of wild beasts. The Indian cotton fabrics even in ancient times won the poetic description of "woven wind."

### Defoe Attacks Calico

THE LONG controversy of English wool versus India calico was much complicated by the fact that the mighty East India Company was reaping great profits by bringing the calico to England, and this pampered and powerful company stood too close to the government to be in the least interfered with. Nevertheless the wool interests succeeded in getting many a law passed to force the wearing of the wool.

In a "Scarce Pamphlet by Daniel Defoe," printed in London in 1720, we find a typical attack on the importation of calicoes. After explaining that "Printed and Stained Calicoes" were used and worn by all sorts of people and that this decreased by the same quantity the consumption of English woolsens, and that English silver was shipped out to pay for

these calicoes, he continues: "If ever the Use and Wearing of Calicoes and Silks comes to be prohibited, all this Mystery of Iniquity will be discovered or will discover itself."

To make matters worse he found that some women had more than one dress. "There are many thousands of women," he said, "who have two or three several suits of Calicoe at a time, for morning gowns, Wrapping Gowns, and Mantuas, and such like."

### England Bleeds, India Prospers

DEFOE bolsters his argument with an extremely forceful statement of the then dying mercantile theory:

To judge of this (East India Trade), you must consider Europe one Body, one nation, or one general Interest in Trade, and set the East India Trade against it as another. The East India Trade exhausts the whole Treasure of Europe, and destroys thereby their trade; carrying every Year such immense Sums of Money in Specie out of Europe into India, that the whole Body must feel the want of it very sensibly. In Return of which they bring their chief manufactures and their Growth, and fill these Parts of the World with Galety and Trifles, and rob them a second time of the Employment of their People.

Thus, he says, these East India imports rob the people of England of their coin and starve their poor. He next employs the simile of a man bleeding to death:

Thus, in a word, Europe, like a body in a

warm Bath, with its Veins opened, lies bleeding to Death, and her Bullion, which is the Life and Blood of her Trade, flows all to India, where 'tis amassed into infinite Heaps, for the enriching of the Heathen World, at the Expense of the Christian World.

In the Debates in Parliament for the year 1680 (November 9) is found a light on the mercantile theory exactly in harmony with Defoe's views. Says the petition before Parliament:

The people in India are such Slaves as to work for less than a penny a day; whereas ours here will not work under a Shilling; and they have all materials also very reasonable and are thereby enabled to make their Goods so cheap as it will be impossible for our People here to contend with them.

The only remedy, says Defoe, is the forbidding of the use and wearing of printed calico:

... 'Tis a particular to the calicoes and East India Goods, that they are chiefly used for Upper Garments; if they were less exposed, it would be more difficult to restrain them, but as it is, 'tis easy to do it.

But it was not "easy to do it," as the lawmakers found when they enacted laws conflicting with the styles in dress. Many such laws were passed, but only one typical law will be cited here, the statute of George I. This act recites:

That the wearing and using of calicoes printed, painted, etc., did manifestly tend to the Detriment of the Woolen and Silk Manufacturers, and to the Increase of the Poor in the Kingdom; and therefore enacted, that after December 25, 1722, none should wear in Great Britain any garments of printed, etc., Calicoe under penalty of £5, etc. That after this time no such Calicoe should be used in any Chair, Bed, etc.

But the English people liked calico, especially for summer wear. "The Woolen Trade," says a writer in London in 1678,

is very much hindered by our own people, who do wear many foreign commodities instead of our own. Instead of green, say, that was wont to be used for children's frocks, is now painted and Indian-stained, and striped calico... yet our English ware is better and cheaper than this, only it is thinner for the summer.

### The Shameless Dandies

"FLAUNTING in calico shirts" was a practice of the foppish gentlemen which even Macaulay condemned. He wrote:

And was it not a shame to see a gentleman whose ancestors had worn nothing but stuffs made by English workmen out of English fleeces flaunting in a calico shirt and in a pair of silk stockings from Moorsheadabad?

He also spoke disparagingly of a "growing taste for such frippery."

A pamphlet of 1696 said Indian muslins and silks were:

becoming the general wear of England. Fashion is truly termed a witch; the dearer and scarcer the commodity, the more the mode; 30s. a yard for muslins, and only the shadow of a commodity when procured.

Daniel Defoe complained that "the general fansie of the People runs upon East Indian goods."

A pamphlet of 1728 stated the case in this way:



"Laws were made to prohibit the wearing of the beautiful Indian calicoes. Yet the ladies and gentlemen followed the whims of fashion, then as now. Fashion, fickle as it was, proved more potent than political statutes."



The late acts prohibiting the use and wearing of printed calicoes either in clothes, equipages, or house furniture, were, without question, aimed at improving the consumption of our woolen manufactures, and in part had an effect that way. But the humor of the people running another way, and being used to and pleased with the light, easy and gay dress of the calicoes, the calico printers fell to work to imitate these calicoes by making the same stamps and impressions, and with the same beauty of colours, upon linen.

This same pamphleteer blames the ladies for the irrational fashions, and for their "ungovernable passion for fashions." They have injured English manufacturers. He despairs of any reform. The ladies claim "English liberties as well as men, and they expect to do what they please and dress how they please." So the ladies had their way, and England finally made a fabric entirely of cotton, when spinning was perfected.

The sanest opinion on the wool-calico controversy was that of Sir Josiah Child, written in 1694:

All our laws that oblige our People to the making of strong, substantial (and, as we call it, loyal) cloth of a certain length, breadth, and weight, if they were duly put into execution, would, in my opinion do more hurt than good; because the Humours and Fashions of the world change, and at some times in some places (as now in most) slight cheap light cloth will sell more plentifully and better than that which is heavy, stronger, and truer wrought; and if we intend to have the Trade of the World, we must imitate the Dutch, who make the worst as well as the best of all manufactures, that we may be in a capacity of serving all Markets and all Humours.

### Wool Shrouds by State Edict

AND IN a similar vein Dr. Devanant (London, 1696-7), arguing that it is wrong to try to force consumption at home, but the "natural" way is to produce cheaper in England, and "undersell" all comers in the markets abroad.

When the lawmakers saw that they could not make the living wear wool, they passed an act aimed to secure the more effective observance of the grim old law of 1666, which enacted that every dead person should be buried in a woolen shroud. "If the people while alive were so perverse and unpatriotic as to prefer foreign to domestic fabrics for their vestments, they should at all events not be allowed to carry their fripperies with them to the grave."

But how tenaciously the lawmakers clung to the fond idea that England might secure a monopoly of the world's wool trade. The belief persisted that English wool was the best in the world; that it could be kept at home so that even smugglers could not get it out; and that the exportation of woolen cloth would enrich the kingdom.

By the statute of the 8th of Elizabeth the exporter of sheep, lambs, or rams was for the first offense to forfeit all his goods forever, to suffer a year's imprisonment, and then to have his left hand cut off in a market town upon a market day, to be there nailed up; and for the second offense to suffer death. By a statute of Charles II the exportation of wool was a crime subject to the death penalty.

Of this edict, Adam Smith wrote:

Our woolen manufacturers, in order to justify their demand for such extraordinary restrictions and regulations, confidently asserted that English wool was of a peculiar quality, superior to that of any other country; that the wool of other countries could not, without some mixture of it, be wrought into any tolerable manufacture; that

fine cloth could not be made without it; that England, therefore, if the exportation of it could be wholly prevented, could monopolize to herself almost the whole woolen trade of the world; and thus, having no rivals, could sell at what price she pleased, and in a short time acquire the most incredible degree of wealth by the most advantageous balance of trade.

This doctrine Adam Smith points out to be "perfectly false." English wool was not necessary to the making of fine cloth; fine cloth was made entirely of the Merino wool from Spain. "English wool cannot be even mixed with Spanish wool as to enter into the composition without spoiling and degrading, in some degree, the fabric of the cloth."

That smugglers succeeded in carrying on a brisk trade in exporting English wool, in spite of the death penalty, is evidenced by the pamphlet of Joseph Trevers, printed in London in 1675, entitled "An Essay to the restoring of our decayed Trade, wherein is described the Smuglers, Officers, and Lawyers Frauds, etc."

It is well known that the Smuglers are none of the meanest Persons in the Places where they dwell. . . .

Indeed smuggling was quite a decent profession, as well as a profitable one, and even the lawyers and sheriffs had their share in it.

Reading the story of the wool trade as told by those who took part in it, one is reminded of a certain negro spiritual of ours which runs:

Nobody knows the troubles I've seen!  
Sometimes I'm up!  
Sometimes I'm down.

The wool trade was sometimes up, sometimes down, wholly irrespective of the laws on the subject. It was "up" under Elizabeth; it was "down" under James I. Foreign wars, debased coinage, religious persecutions, were some of the factors in the problem.

A man who signed himself "A Merchant," writing in London in 1719, at a time when the wool trade was in a low state, addressed himself to the complaining weavers who were out of work, and exposed the fallacy of having the government help them out of their troubles:

'Tis plain, indeed, that all of them have not Work, or are not employed in such work as they ought to be; otherwise we should not see such numbers of them committing such brutish actions in the Streets as would be a Scandal to any civilized Nation. . . . But however, to ex-

amine the matter thoroughly, viz., that the wearing of printed Calicoes is the Occasion of their wanting work. . . .

If this were so, he argues, wool would be cheap in price, but wool is scarce and dear. He continues:

Beside, the Prices of printed Calicoes do so far exceed the Prices of Woolen or Worsted Stuffs, that they do not interfere with them; for those that buy Stuffs buy them for Cheapness, which I am sure cannot be said of those that buy Calicoes; of which Truth our Wives make us sensible, to our cost. . . . May not many other Trades make Pretences as well as the Weavers? May not the Maltsters and Brewers rise up against the Vintners because they sell a foreign Commodity, which hinders the sale of Malt Liquors? And may not the Alehouse-Keepers against the Distillers, because their Spirits not only hinder the Sale of their Beer and Ale, but enliven, heat and fuddle sooner and more effectually? And why may not the Weavers of Norwich and Coventry rise against those of Spittlefields, because their Stuffs and Silks hinder the Sale of Their Crape and Tammies? And why not the Butchers against the Fishmongers? and so on to the End of the Chapter.

When the British manufacturer saw that the people would wear calico, regardless of statutes and penalties, these manufacturers—or at least of the more crafty ones—called their woollens "Manchester cotton." This disguise fooled very few. Then linen was stamped to look like cotton. But finally economic evolution, like a law of fate, was accepted. Machinery for spinning and weaving cotton fabrics was invented. Slowly but surely wool was crowded into second place in the commerce of English cloths, and last of all, India began to take cotton goods from England.

The exports of cotton to India increased four-fold in the thirty years, 1853 to 1883. Now the land of the so-called "pauper labor" is among England's best customers for cotton goods. And this despite the fact that every sort of restriction was placed by the English Government in the way of the development of a British cotton manufacture. How powerful and inexorable are economic laws. How feeble are statutes which run counter to them.

Editor's Note: This is the first of two articles on old-time government regulation by Professor Boyle. The second, "The Frenchman's Wheat," will be published in the January issue.

## Our Disorder a Mark of Progress

TO THE EDITOR—The American visitor to Europe is always struck by the order and trimness of everything.

All is spick and span to the highest degree. In Germany I observed that the peasants arranged their firewood in geometrical forms. The roads, hedges, shrubbery, and fields of England are handsomely groomed. Everything is intact; all is snug. While at home—

For three months the street in front of my downtown office has been torn up. The pavement is being widened; new car tracks, new telephone cables, new steam conduits, new water pipes are being laid. Next door, the telephone company is about to begin construction of a twenty-story building. There will be pounding and disorder in this neighborhood for two years.

For the past year I have driven to my farm, at my peril, due to the widening of the road and the laying of sewer and water mains. Within a mile of the farm a handsome school building is under construction.

I have lived in a growing city for twenty years. Today's farms are divided into building lots tomorrow. Dirt roads of fifteen years ago are now dotted with traffic police. Old-fashioned colonial homes are razed and ten-story apartments rise on their sites.

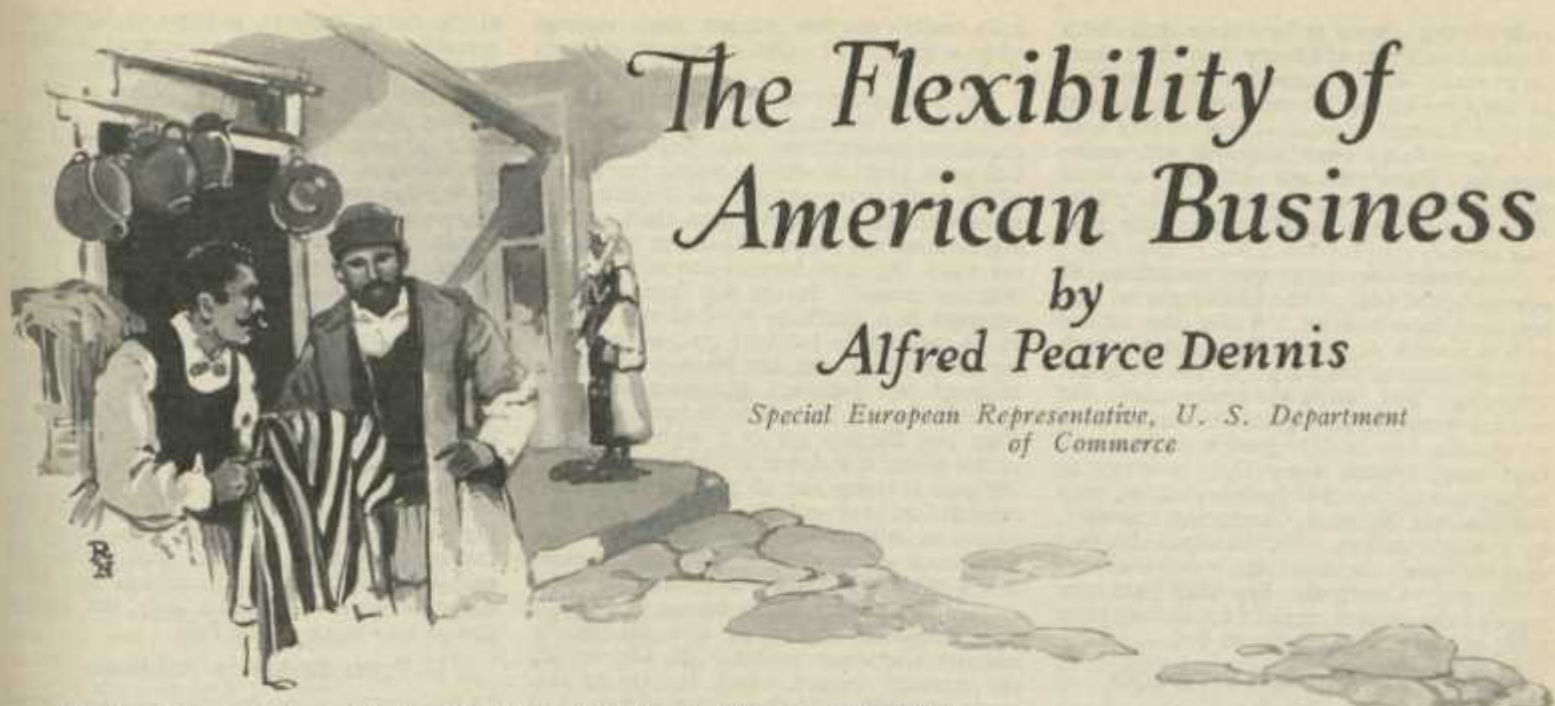
Nothing comparable to this occurs in Europe. The Englishman builds a country home with his great-grandchildren, unborn, in mind as prospective tenants. An American, living in a growing city, is fortunate if he can anticipate the future by ten years. The tendency, therefore, is to build for short life, and to postpone the purchase of a lot in a cemetery until the age of seventy.

To weep about this would be as futile as to weep about the weather.

When this country stops growing, it can take a long breath and put its house in order. Until then we must put up with the pains which growth implies.

Fortunately, the glory of America is in the future, not in the past.—W. F.





"Our idea of the fixed price is alien to commercial practice in Greece. Prices are established by a process of skilful fencing. Price thus becomes a variable depending upon the skill of the bargainer rather than upon the quality of the goods."

**H**UMAN experience may be measured in terms of either extension or intension. We all live under sentence of death but with a sort of indefinite reprieve. Life cannot be prolonged at will but it can be intensified. In the brief interval of a human lifetime the struggle to get out of life all it has to give means a struggle to live intensively.

Water though fluid is practically incompressible. Not so human experience which, though fluid as quicksilver, may be intensified, compressed. The more complex the civilization the more there is to be done in a limited time. Abbreviation, while a poor weapon, is the best we have for the conquest of time and space. How to get things done in a limited time; short cuts and abbreviation, the application of the principle of intension. The amazing thing about our western civilization is its ability to conquer space and time.

The great thing that lies behind American business is the urge to do something better than it has been done before and to do it quicker. American business, particularly in the past twenty-five years, has been governed by the principle of intension. This quality pervades the entire structure of American business.

### Bursting Tradition's Shell

**A**S AN illustration, the writer is trying to get something done at the present moment. That is his business. With respect to the work in hand he is strictly limited in time as to its preparation and in space as to its length. Fulfilling the task is a matter of intension. The writer therefore cannot wander discursively. Where a thousand words might be employed to labor an idea a hundred must suffice. Where a dozen illustrations come crowding in, only one or two can be employed.

The metaphysics of American business is to get a job done well and done quickly. If we can't succeed in the old way we are ready to try something new. American business develops as a crab grows by bursting its old shell and casting it off. Liberation from the hard shell of tradition—constant adaptation to new conditions, the principle of elasticity applied to American business as contrasted with the principle of fixity which prevails among the older peoples of the seven seas.

In general, the peoples of the old world are born into a position of fixity, while the position of the men in the new world is subject, as the railroad schedules put it, to change without notice. The life of the Oriental is cramped by a shell of custom and tradition. To cast one's social and economic shell in such a country as India or China is a difficult and painful operation. In this country human relationships are determined more by contract than by status. The log cabin furnishes occupants for the White House and the majority of our best executives come up from the ranks.

So much is fixity a rule among ancient societies that innovation, when it does take place, is concealed under the form of legal fictions. Among the ancient Romans a man could not better his social status by marriage except through the legal fiction of adoption. When the British introduced concrete dams, steam pumping plants and all the paraphernalia of modern broad scale irrigation into India, the natives by a legal fiction administered the new system of irrigation according to supposed rules that had been laid down by priestly law-givers some thousands of years before.

Let an illustration or two of business inertia be taken from the two oldest civilizations in Europe. Agriculture for 7,000 years has been the dominant occupation in the Italian peninsula. The tillers of the soil since the Dark Ages have been wont to live in walled cities on the mountain tops as a refuge from feudal robbers and malaria. For a thousand years the job of tilling the fertile lands of the valleys has been done at arm's length by dwellers on the hill tops.

Men no longer have to seek asylum in walled towns from feudal robbers and the modern world has learned how to deal with malaria. Yet this elemental problem of getting within reasonable striking distance of one's work remains unsolved in the Italian peninsula—a commentary on social and occupational inertia.

The writer knows of but one agricultural locality in Italy in which the farmers live in detached houses on the soil they till.

Some fifty years ago the basin of Lake Fucino in the Apennine Mountains was arti-

ficially drained by boring a tunnel through its granite rim. About the time this great engineering work was completed a violent earthquake leveled every farm village in the neighborhood. It so happened that new houses were built on the new land artificially provided. Thus it took a great engineering enterprise and an earthquake to free the Italian peasant in this particular region from his occupational strait-jacket.

As the Italian farmer wears out his life uselessly in trudging up and down the hill slopes to perform his day's work, so the Greek trader wastes an incredible amount of time and energy in his business transactions. For two thousand years trading in Greece has been done according to the traditions and practices of the East. Time means nothing to the Oriental hence his merchandising is done on the principle of leisureliness rather than on the principle of abbreviation. An immense amount of time is thus wasted in palaver, ceremonial politeness and haggling over prices. The Greek business man having been born into this status is unable to extricate himself from it.

### Custom Controls Greek Trade

**A**MERICAN business is built on the principle of abbreviation which means obtaining a maximum turnover in a minimum time. Our idea of the fixed price is alien to commercial practice in Greece. Prices are established by a process of skilful fencing. Price thus becomes a variable depending upon the skill of the bargainer rather than upon the quality of the goods. The Greek business man, so to say, is stuck in a rut. He is caught fast in his hard shell of custom and unable to throw it off. His life is dominated by the principle of fixity rather than of flexibility.

We get a proper perspective of American business by contrasting it with the practices of alien peoples. The quality of flexibility is a novel and exceptional thing in the history of world business. This amazing flexibility—the capacity to burst the old shell and cast it off—works itself out in infinite variety. An illustration or two may be cited of shifts in natural resources, occupations, manufacturing, distribution.

As an illustration of shifts in natural resources, let us take the fisheries of Chesapeake Bay. An ancient statute in the Maryland



code forbids owners to feed their slaves with diamond-back terrapin more than three times each week. This humane law takes us back to the time when diamond-back terrapin was so plentiful and so poorly esteemed that even the negro slaves were surfeited with eating terrapin. These creatures today sell for about one hundred dollars per dozen, and as a food rank in the estimation of epicures with Russian caviar.

Next came the oyster with enough native oysters in the beds of the Chesapeake to supply our entire market. Today the natural beds are sadly depleted. Destruction crowds upon the heels of the industry. But for oyster "planting" and artificial conservation, the country would be facing an absolute shortage of oysters. As to fish, another natural sea-food crop, records show that as many as twenty-two million shad have been taken from the Potomac River, a Chesapeake tributary, in a single season. Six hundred thousand shad is about the best the season now affords, and "Chesapeake Bay shad" are now supplied the eastern markets by hauling them 3,000 miles from California on ice.

### Musk rats Raised to the Purple

**BOTH** the oyster and fish takings of the Chesapeake have decreased by 50 per cent in the past twenty years but within that time the soft shell crab business has waxed mightily. Soft crabs to the value of more than three million dollars were shipped from the little Chesapeake Bay port of Crisfield in the year 1923. Crabs are now as savagely exploited as was the oyster in days gone by and in point of quantity the crab fisheries have fallen off by half in the last ten years.

The river tributaries of the bay on its eastern side are flanked by extensive fresh water marshes which in times past were considered practically worthless. Today acre for acre these marshes are as valuable as the best cultivated highlands of the state. These marshes are the natural habitat of short-legged, beady-eyed, amphibious little fur-bearing animals known as muskrats. These creatures breed from three to five times a year with from six to eight head to the litter. The unsuspicious and confiding muskrat is easily trapped. While in the old days these little animals were worth only a few cents in the market, good specimens today fetch as high as three or four dollars apiece. Costly fur coats put on the market as musquash or Hudson seal command fancy prices in the fashion centers of the world. Muskrat farming has thus become, through the dictates of feminine fashion, an extremely profitable business.

With destruction running riot on the one hand, conservation and higher prices on the other, probably just as many men get a livelihood and more wealth is being taken out of the Bay now than at any time in its history. The logical shift of course is toward conservation and restoration. Oysters are being cultivated through private enterprise on a broad scale as one would raise a crop of corn. Diamond-back terrapin are being farmed successfully. Measures are now mooted to prevent the wholesale destruction of hibernating crabs by winter deep-water dredging.

Another illustration as to flexibility in the use of natural resources: Fifty or sixty years ago the saw mill men operating North Carolina pine were wont to complain that their business was threatened with extinction. All the good timber was being cut out. The grandchildren of these men are running bigger and more profitable mills in exactly the same localities. The old-timer concentrated on heart pine cut from trees showing ring growth of at least a hundred years. The

mills today cut box lumber from saplings with a growth of only fifteen or eighteen years.

The development of rail transport and the extension of trucking areas has created an enormous demand for box lumber. Mills find good profit in cutting young sap timber which forty years ago had no merchantable value whatever. Similarly gum timber which a generation ago possessed little or no stumpage value, has now become one of our most desirable woods. In the old days gum was regarded as a worthless wood chiefly because of its incorrigible habit of warping and trying to crawl all over the house when manufactured into lumber. Manufacturers have learned how to treat this intractable wood. They boil the sap out of it with live steam before giving it a course in the dry kiln. The red gum is today one of the finest and most beautiful of our cabinet woods. Exquisite figures as delicate and capricious as the frost formations on a window pane are revealed in its grain when quarter sawed. Gum is sold in the market as satinwood and is the only American hard wood that successfully imitates Circassian walnut. As for walnut, our standard cabinet wood, the stump formerly regarded as of no account is now rated as the most valuable part of the tree. The whorls of the stump provide the most beautiful and variegated patterns for walnut cabinet work.

So it is that American genius for adaptation displays itself in varied forms. We never get through destroying. We never get through creating. Conservationists solemnly warn that we are prodigally running through our national endowment of raw material. But we turn and twist and apply our inventive and creative genius. Absolute exhaustion of a major raw material continues to dip beyond the horizon and is never reached. There is something about the destruction of natural resources which carries within itself the seeds of construction and repair. Every generation makes a shift to develop latent and unsuspected resources—to employ useful substitutes. No one need deny himself an extra hunk of anthracite for fear that our coal resources may some day become exhausted.

### The Pick and Shovel Fadeout

**O**CCUPATIONAL adaptations. Where this country once developed muscularly with axe and saw and pick and shovel, it now grows on mechanical power. We build machines which do the work of a dozen men and do it better. It would be writing platitudes to review the story of occupational displacements by labor-saving machinery.

Since the Lancashire spinners and weavers broke in pieces the new fangled machinery which threatened to displace them, intelligent western people see things differently. The needle woman in Hood's plaintive "Song of the Shirt" would have no quarrel with an American sewing machine. Machine made, ready-to-wear garments furnish more work and better pay. Modern industrial life with its ingenious machines creates a dozen new trades for every ancient handicraft destroyed.

As civilization becomes more complex, the accessories and paraphernalia of life multiply astoundingly. Old trades, such as spinning and weaving, tanning, brick making, pottery were few in number and extremely simple. New trades by the score are connected with such comparatively new products as rubber and sugar. Expanding in an infinite progression are trades depending upon mechanical technique, chemical science, engineering skill. Along with these trades, spreading fanlike in infinite variety, are occupations arising out

of the tastes, caprices, fashions of highly organized modern society—mannequins in smart Fifth Avenue modiste shops, tea-tasters in great import houses, tripe smellers in meat-packing establishments.

Occupations are created or destroyed by the whimsies of fashion—by changing ideas as to what constitutes value. The breath of fashion can elevate coarse monkey fur to the purple. Connoisseurs value at \$4,000 a ragged Persian rug made four hundred years ago when a more serviceable floor covering can be had for forty dollars made in Philadelphia forty days ago. The value of diamonds exists in the imagination. If diamonds should go out of fashion in Paris, London, or New York, the great Kimberley mines in South Africa would be compelled to shut down and the world would go on none the worse.

We box the compass occupationally. Fishing and hunting are the daily occupations of the savage but among such highly civilized people as the British and Americans they have become amusements which only the leisure classes may enjoy to the full.

### From Stable to Affluence

**ARISTOTLE** in his Politics, writing a good many centuries ago, observes that if shuttles could work by themselves and the plectra and zither could play by themselves we should need no more slaves. In Aristotle's time the work of the world was chiefly muscular and was done by slaves. While they went about their daily tasks, other classes leisurely lived on the fruit of their toil. In our western civilization the man who does not work is rather under suspicion and there is more and more work to be done despite the fact that we have invented automatic looms to do our weaving and electrically operated machines to play our pianos.

Within the past twenty years the livery stable managers, carriage drivers and wagon builders have been faced with extinction by the automobile. Most of them went with the current instead of against it. Many a man who made but a bare living in the old days as a livery stable keeper has come into sudden affluence as a garage manager. While automobiles and airplanes will never run the horse shoers entirely out of business there has been a falling off in a decade (1910-1920) of 68 per cent in the number of livery stable managers, 74 per cent in the carriage and hack drivers, 58 per cent in the wagon and carriage builders. On the other hand the number of automobile factories has increased by 476 per cent, the number of chauffeurs by 532 per cent and the number of garage managers and keepers by 706 per cent.

For purposes of illustration, manufacturing and distribution may be considered from the same angle. They hang together, one is a complement of the other. Let the piano be taken as an illustration of the elasticity of American business on the side of manufacturing and merchandising. In the last ten years the piano industry has had to fight for its very existence. The scheme of American domestic life runs more and more counter to the piano. Urban life becomes compacted into diminutive quarters, tiny apartments served with conveniences and comforts out of accumulated reservoirs of heat, light, power, water, ice, with super-refinements in the way of mechanical musical instruments or intelligence brought in from various central pools over a wire or through the ether. Secondly, the ample leisure we had in earlier days is yielding to the feverish activity of a more highly keyed civilization. Young people no longer submit to the discipline of piano prac-



tice. If they had the disposition, they lack the time. Third, the piano has to meet the competition of ready-made music in the phonograph and radio. Fourth, there is the competitive impact of modern amusements such as moving pictures, the automobile, the craze for outdoor sports. All this is enough to have blighted the entire industry and thrust it back twenty years in development. But the piano business withal has suffered no retardation in its normal growth and today stands slightly above the average of all American industries including that of the phonograph.

The compensatory factors are found in the rapid increase in national wealth and the growing pride in household ornamentation, but chiefly in the genius of the industry for adaptation. The industry has consciously changed its merchandising methods to meet new conditions. In the old days the dealer sat in his shop and waited for the customer to come to him. Now he makes a shift to take the piano to the customer.

The piano lying on its back is sent about the country in motor trucks. A tilt of the truck deposits the piano in an upright position at the customer's front door just as a load of coal is dumped into the cellar chute. The truck driver is an Admirable Crichton—chauffeur, musician and salesman. He treats the prospective customer to a free musical exhibition and is graciously accorded permission to leave the piano in the customer's home until his return trip. It often happens that the piano becomes a permanent tenant. Pianos are thus sold to people who never dreamed before that they needed musical instruments.

They are also sold as household ornaments to people devoid of musical taste. An agent known to the writer succeeded in selling a piano to an old lady who for the past twenty years has been perfectly deaf. Similarly parlor melodeons and enlarged crayon photographs of deceased ancestors are sold by enterprising traveling agents to some of the poorest families among the Negro populations of our southern states.

When the pace of industrialism is too fast a point is reached in which distribution is upset. The remedy is either in slackened production or in improved methods of distribution. We look about us and find American business employing novel devices, probing and exploring every nook and corner of the untried. The piano dealer, instead of concentrating on a single instrument, will carry in his salesrooms side lines such as sheet music, phonographs and radio outfits. The tobacco salesman carries not only cognate side lines such as pipes and patent cigar lighters but men's specialties such as safety razors, canes, umbrellas, toilet articles. We spent years getting away from the general store to the

specialty shop and now we are working back from the specialty shop to the general store. All is typical of the genius of American business for adaptation and change.

This elastic quality of American business is one of the great secrets of its success and is precisely the thing which most distinguishes it from the business methods of older societies which are governed by tradition rather than by function. Take European architecture, for example. It develops through tradition. Buildings are constructed according to precedents laid down by men who have gone before, whereas American architecture strikes out alone and without precedent having as its goal the function for which the structure is intended.

#### New Trades Built on Ruins of Old

A BANK building in Vienna or Berlin might be used for a grocery store or a curio shop. Not so in the United States. A bank building is constructed for a particular purpose. Our office buildings are designed to meet the problem of abbreviation. In our great cities ground space is limited and the earth overbuilt. These buildings like stately pines shoot upward seeking light, air and a place in the sun. The architectural problem of verticality involving the conquest of space and time has been solved in original fashion by American genius through the use of steel and concrete and the modern express elevator.

Elasticity enables us to reerect through adaptation new business on the ruins of old. Huge factories of brick, glass and expensive machinery devoted to making the old-fashioned corset now are diverted to making elastic girdles, reducing garments, golf garters and

other articles demanded by an ever-changing age. Industries are laid in ruins by a breath, by a whimsical change in feminine styles, a turn or a twist in human taste—creative achievement overnight and values in the far corners of the globe go tumbling to ruin. Twenty-five years ago the indigo crop was worth twenty million dollars a year to India with the crude dye once fetching around \$4 per pound. Today the industry is in ruins. German research gave the world synthetic indigo which sells for about 20 cents a pound.

The back and fill of American business! The steady onrush of its general movement! The amazing development in the past twenty or twenty-five years! Motion picture industry rising from an insignificant peep show to the eighth industry of the country with the weekly film attendance in the United States of fifty million people!

Twenty years ago electricity in the home was a luxury of the few. Today 60 million people in the United States are living in electrified homes and work in electrified factories, offices and stores.

Twenty-five years ago it was a novel thing to be able to convey energy from one point to another over a wire. Today we have superpower with its trunk-line transmission and big central lakes of power that flow freely in all directions.

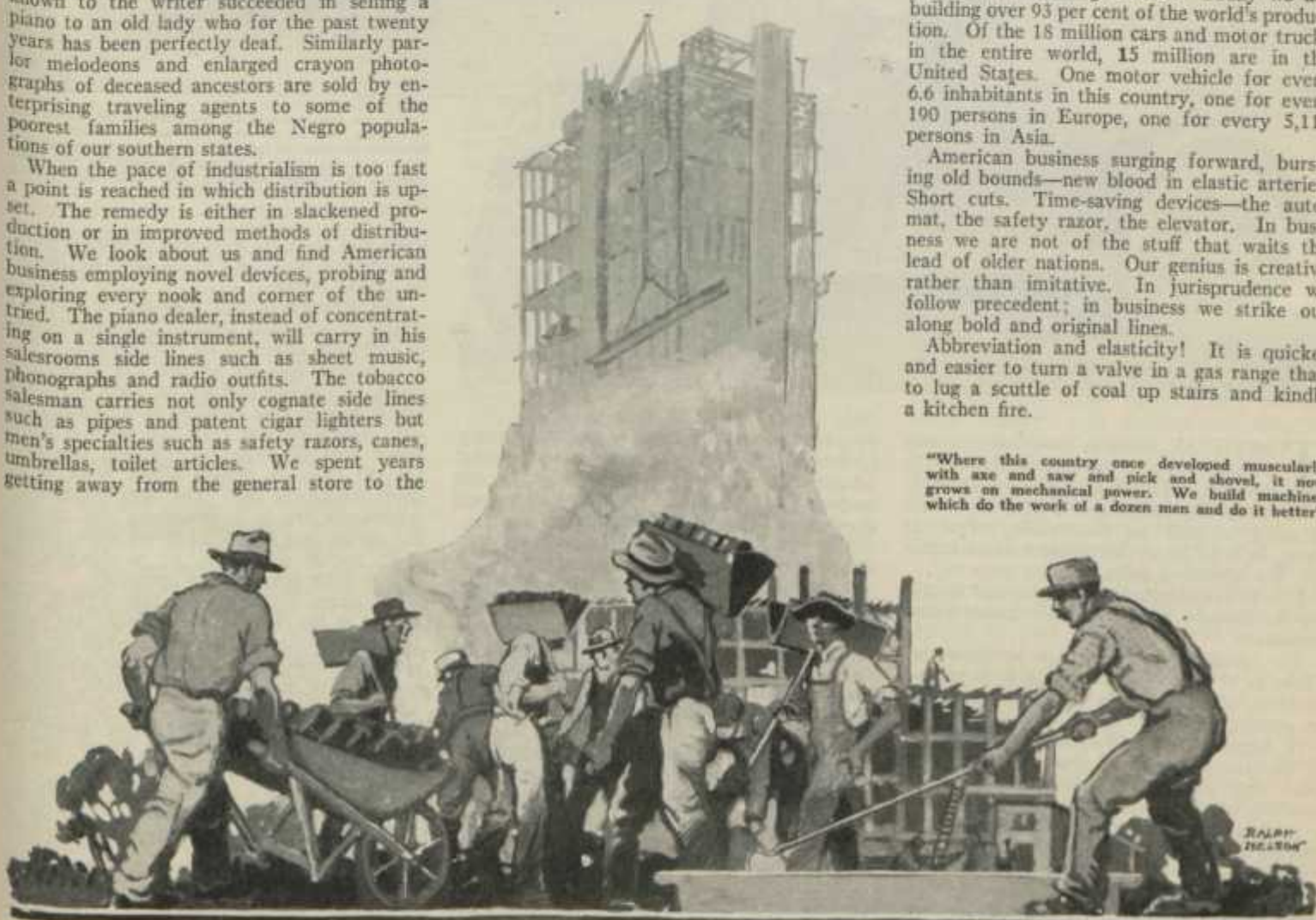
Ten years ago we produced less than 7 million pounds of dyes. Last year we turned out nearly 94 million pounds. Where a decade ago we were importing 90 per cent of our dye requirements from Germany, today we are manufacturing at home 96 per cent of our needs.

Twenty years ago our automobile industry was in its swaddling clothes. Today we are building over 93 per cent of the world's production. Of the 18 million cars and motor trucks in the entire world, 15 million are in the United States. One motor vehicle for every 6.6 inhabitants in this country, one for every 190 persons in Europe, one for every 5,116 persons in Asia.

American business surging forward, bursting old bounds—new blood in elastic arteries. Short cuts. Time-saving devices—the automaton, the safety razor, the elevator. In business we are not of the stuff that waits the lead of older nations. Our genius is creative rather than imitative. In jurisprudence we follow precedent; in business we strike out along bold and original lines.

Abbreviation and elasticity! It is quicker and easier to turn a valve in a gas range than to lug a scuttle of coal up stairs and kindle a kitchen fire.

"Where this country once developed muscularly with axe and saw and pick and shovel, it now grows on mechanical power. We build machines which do the work of a dozen men and do it better"





# Have We Enough Highway Floor Space?

*The Parking Problem from the Viewpoint of the Automotive Industry*

By ALFRED REEVES

*General Manager, National Automobile Chamber of Commerce*



There are two aspects to the parking problem: One is to take care of the cars that are abandoned in the business section of the city from morning until late afternoon; the other is to provide space for the automobiles of women shoppers and other short-period parkers.

more and more by men who prefer to travel to and from their work in the heart of the city by motor vehicle.

The meeting of this situation is simply a matter of adequate commercial enterprise and of energetic attention by motor clubs.

It is true that not all the cars in the city could be accommodated in such terminals but it is also true that no such demand exists. Going to and from the office is but a minor part of motor vehicle use, especially for the man or woman whose work is indoors during the day. The chief terminal requirements are of a temporary and individual nature and hence relatively more simple.

To put it concretely, let us describe the day of John Jones, realty operator:

He leaves his house at eight o'clock, and arrives at his office at eight-thirty. He parks his car in front of the office while he goes over the morning's mail. At nine o'clock he goes out to make a series of calls, parking his car perhaps fifteen minutes in front of each place. Perhaps he drives home for lunch, parking his car in front of his residence.

The afternoon is another series of calls and parkings, with a short period for the car in front of the office while he is closing up business for the day.

Meanwhile, Mrs. Jones, who also has a car, is bringing it downtown and leaving it for a time, perhaps for as much as half an

**T**ERMINAL facilities have always been a chief factor in transportation and the motorist is just waking up to that truth.

Recently the question of where the owner is going to park his automobile, where, in short, he is to locate his transportation terminal, has become a more pressing issue.

It is indeed demanding thought, and in calling for thought has occasionally created consternation.

The situation, however, can be improved. There is a danger of regarding it as a vast problem, chiefly because hitherto it has been no problem at all.

If, however, we will consider two factors in the motor terminal situation, it will be clear that engineering ability and scientific handling of traffic can meet city needs, with a minimum of discomfort, investment and readjustment.

First, there is the all-day parker. For him there must be stations or sheds. If enormous railway terminals have been possible, surely we need not be abashed by the need

for constructing enormous parking garages.

Second, there is the short-period parker who forms by far the larger part of the motoring public and it is with this second group that we are most concerned.

The man in the first classification who drives downtown in the morning, who does not use his car for business during the day, will probably find it increasingly safe, satisfactory and necessary to keep his machine during this idle period in a motor terminal.

Cars in this group are now being stored on the roofs of buildings, in basements, in open lots, and in mammoth parking garages, such as those now being erected in Detroit, which will accommodate several hundred cars each. In Chicago the motorists are urging the city to finance a self-supporting garaging shed.

I believe that many municipalities will find such a plan to be a worth-while addition to its transportation facilities. At any rate, the parking terminal for all-day cars is a commercial possibility and these will be used



hour, in front of the post office, the department store, the beauty parlor, the confectionery store. To provide for sufficient parking of this type is essential.

Obviously, the user of an automobile must be able to leave his vehicle for a limited time before the various places where he has errands, just as the owner of the horse and buggy required hitching posts. To hamper this type of parking would be regulation in favor of the limited few who can employ chauffeurs. The great mass of people owning the great majority of the cars will always find a way to accommodate limited parking.

When we consider that the railroad which brings in its trains temporarily must have enormous buildings to care for the massing people and freight at one point, it becomes clear that the problem of arranging space for scattered motor vehicle transportation is relatively more easy.

It will not necessarily be self-adjusting. The railroad does not guess at the number of trains it will need, at the number of tickets it will sell, at the terminal facilities it will require. It keeps record of its experiences.

#### Five Points Open to Study

THE modern city must adopt some such constructive attitude towards its streets. We are to be congratulated on our good fortune that conditions are not more chaotic.

Every city of over 100,000 population and perhaps smaller should have a traffic administrator who would determine these things:

- (a) On what streets are there insufficient parking spaces to accommodate the public?
- (b) Is this parking congesting traffic?
- (c) In the congested areas, how many of the cars are all-day parkers?
- (d) Are there parallel streets which are not being used to capacity?
- (e) Are there bottle necks?

Without a knowledge of these elementary points any city is merely guessing at its traffic ills.

These are not matters which should be placed on the shoulders of the police.

We have unfortunately in most cities put up to the traffic officer the almost impossible job of trying to enforce parking ordinances which the public will not respect because it instinctively realizes that the ordinances usually have been adopted not in the light of understanding, but as gropings in the dark.

There has been a good deal of unconsidered thinking concerning the congestion which parking creates. In many cases the theory is parking a half truth. The greatest cause of congestion, which complicates parking and all the other phases of traffic, is that of bottle necks.

In many cities such as Providence, there may be one main bridge or avenue leading out at one end of the city. When this becomes choked up, the effect is felt back through all the streets of the city. Double lines of cars become jammed. Cars parked at the curb cannot get away and add further to the confusion, but the basic trouble is in the stoppage of the free flow of traffic.

Keep it moving. That is the chief answer to the different elements in traffic and though it seems a contradiction in terms, it is the major answer to parking.

Just as the railroad terminal escapes congestion through the dispatching and arrival of trains on time, which means better operation all along the line, so the efficient handling of traffic along the highways will mean adequate space at the curb and opportunities for driving in and out of these spaces.

The broadening out of these bottle necks may call for rebuilding in our cities. En-

gineering experts realize that traffic is not now operated with anything like its maximum efficiency. Yet there are doubtless many situations where only a surgical operation will work a cure.

Such operations are certainly within the realm of the possible, the expected, and the desirable.

When we increase constantly the population of our cities, we naturally expect to add to the facilities.

We are likely to find in America that our municipalities are developing into a number of virtually self-contained neighborhood centers, but regardless of this fact, I think we shall need widening of streets to accommodate conditions.

While such engineering changes may appear to be costly, the expenditure will be much minimized by the savings effected through better transit. Likewise it may be noted that no physical feat need seem staggering to a nation which can build the Panama Canal, can blast Hell Gate and can construct the Croton Reservoir. These comparisons suggest the problem at its maximum. Actually, the situation can be remedied in many points, as suggested above, by one authorized individual in a given municipality.

I have touched upon the question of traffic as a whole rather than the one phase of parking, because the questions are inseparable.

Certain suggestions have been outlined. In closing one may predict what is likely to hap-

pen in the future. At present we are in the severest period of traffic congestion. Ten years from now we are quite likely to have twenty-five million motor vehicles on the road instead of fifteen million. That is regarded by some as a conservative estimate.

We shall, however, know how to operate these cars better. There will be more highways, more city streets, better trained drivers, motor terminals for the all-day parkers, intelligent routing of local traffic, detouring where necessary of through travel, scientific utilization of existing space.

We are just beginning to handle this situation, rather than letting it run itself. It is a job for every city, but it can be done.

We need to bear in mind that the question of sufficient room on our highways might be called the proper utilization of floor space. This space on our roads, however, differs from a floor in that it is not filled with permanently stationary objects. In fact, it is occupied with objects which are either actually in movement or to be moved shortly.

When we have determined the relationship of all these elements, we have a reasonably clear picture of what needs to be done, of whether a community requires new facilities or simply better arrangement of its existing accommodations.

Like most huge and apparently perplexing issues, this problem is understandable and conquerable when reduced to its essential elements.

## Are We Deserting the Rails?

By An Ex-Railroader

SOME startling figures indicating that the people of the United States are deserting the railroads for the bus lines and private automobiles were presented by railroad men at two important hearings held by the Interstate Commerce Commission in September. One hearing was on the Pullman surcharge, the other on the reduced-rate scrip book.

The figures were presented by the railroad men to show the losses in revenue they were sustaining by reason of this new competition. It seemed to be generally understood that it was not the relative cost of the two methods of travel that was causing the shift of business to the motors. Cost was an important factor, of course, but the facts indicated that the lines were facing an evolution in passenger transportation and that cost was not the controlling factor.

They presented their figures as an argument for the retention of their present rates on the ground that they were not earning the left-handed guarantee in the Transportation Act. A reduction sufficient to get back the bus and automobile business was simply out of the question. They would be fortunate if the evolution had reached its peak and they were able to hold their present passenger business.

Some of the railroad men were inclined to think that evolution was too strong a term to apply to the shift of business but they changed their minds when these figures were presented to the commission:

Since January 1, 1924, 1,500 bus lines have been established and 5,400 busses, costing approximately \$30,000,000, have been purchased.

Three examples covering different sections of the east were presented to show the inroads the busses were making.

In 1916 the Norfolk & Western Railway sold 110,194 tickets, covering travel between Norfolk and Suffolk, Va. In 1923, only

29,163 tickets were sold.

In June, 1916, the

Baltimore & Ohio Rail-

road sold 5,912 tickets for travel between Blanchester and Hillsboro, Ohio. In June, 1924, 1,970 tickets were sold.

In 1915, the Delaware & Hudson Railroad sold 253,304 tickets for travel between Albany and Altamont, New York. In 1923, 179,331 tickets were sold.

To show the increase in private automobile travel the following illustrations were given:

On August 23, 1924, the Atlantic City police counted 13,900 machines crossing the bridge that connects that resort with the mainland.

On Sunday, August 10, the New Jersey state police counted 22,787 cars on the White Horse Pike.

On September 4, 2,359 cars from twenty-three different states passed along the National Highway near Cumberland, Md., between 7 a. m. and 6 p. m.

Between June 26 and August 31, 1,800 guests registered at the Fabyan House in the White Mountains. The automobile arrivals were from twenty-three different states and Canada and numbered 908, over half.

The manager of the Crawford House, another prominent hotel in the White Mountains, reported that 85 per cent of his guests during the past summer arrived by private automobile.

The manager of the Poland Springs hotel advised that 3,600 of his guests arrived by automobile and 556 by rail.

The Mansion House reported 2,029 arrivals by automobile and 728 by rail. The motor arrivals, as indicated by their license plates, were from thirty-three different states and three Canadian provinces.

The New York Central Railroad reported a decrease of 2,242,640 passenger train miles in 1923 against 1917, due to bus and private automobile travel.



# A Business Innocent Abroad

He Gets "Straight from the Feed Box" Information on the German Republic

By HENRY SCHOTT

IN THE German Republic.—The Duke of Coburg owned a deer forest in the Alpine foothills and was rather vain of the fact that the people all greeted him in passing. One day a native stalked by without a word or a glance.

"Why not say a good-morning when you meet a man on the road?" the duke called to him.

"Because I don't happen to know the gentleman," was the reply.

"Well! I'm the Duke of Coburg."

"That so? It's a fine job—take good care you don't lose it."

Germany was, only a few years ago, full of families with fine jobs—family jobs—that are gone forever. Out at Potsdam, a city built around the royal and imperial court, a part of the ex-*kaiser's* palace is occupied by Isadora Duncan's dancing school. She pays rent the first of every month to the German Republic and all the nymphs and fairies can use the lawns and forests for outdoor work when the weather is fine. From their windows they look down on the great court where, in the days of the fine jobs, the guard was changed every noon to the music of a regimental band. Quite a space from an imperial court to poses plastique.

Tempelhof Field! There the great ceremonial parades were held; thirty thousand Prussian Guards, in the fullest of full dress, reviewed by the *kaiser*. All Berlin crowded around that plain to get a glimpse of their sovereign with his glittering staff, thousands of troops marching past at parade step.

Today the great parade ground is a confusion of what we call community gardens; hundreds of little shacks, each surrounded by a patch of potatoes, or cabbages, or peas. Where the gardeners have not taken possession boys have made playgrounds. The long rows of barracks are used for temporary housing, or, desolate, are on their way to dilapidation.

Once the greatest parade ground in the world—trumpets, flags, bayonets and sabres flashing in the sun, horses, music, the swing and rhythm of marching men—now potato patches. That's how thoroughly those good jobs have been lost.

## Glory of Munich Untarnished

IN MY wanderings through the new republic I have found three Germans, represented by Berlin, the capital; Munich, a secondary metropolis, and the rural, small town and farming community. They do not think along the same lines; they are as much alike as distant cousins with Berlin so far away that the relationship shows signs of disappearing.

I had spent several weeks within 10 miles of the German-Austrian boundary, but the moment I entered a German car and crossed the border a change was apparent. Whatever

has happened to the German he has, outwardly at least, lost none of his love of system and order. The cars—it was a Bavarian train—were clean and the train on time. The crew were spic and span in bright blue uniforms, with double-breasted tunics that in cut and material would satisfy any reasonable major general. Very polite—a formal, snappy politeness that meant business.

From the car window the farm houses and barns were large and substantial with every outward sign of prosperity; fields without a square yard of waste and alive with people at work, men, women and children. In places they were haying, and such hay! Everybody scratching away on hillsides, in ditches, and fence corners along the railway,



with scythes, rakes and forks. They hardly stopped to look at the passing train. Hurred, eager, gathering wisps of grass that would be left on any American farm. I watched them until dark.

It's hard to find fault with Munich. It has all of the physical properties that go to make a beautiful city, and more wide streets, plazas and parks than it really needs. An unruly river halves it, but they have managed to control it with some heavy engineering and made parkways of both banks. Evidently they were also able to put a restraining influence on the architectural expression of the property owners, for the properties in size and style of buildings show few violations. Streets are clean and well paved.

Physically, Munich shows no more signs of war depression than Minneapolis or Detroit. Driving over the city you would never

know there had been a war. Art is its principal industry. I have before me an official list of public museums and exhibitions, mostly paintings, but including porcelain, tapestry, glass and historical collections—thirty-two of them. With the city having recently come into possession of palaces that are now without tenants, the list threatens steady growth.

"Art is a passion with these people," a friend who lives in Munich told me, "and is reflected in everything the city produces. Art and its by-products is what the community has for sale. A man came to paint these rooms and he took an hour of his own time to talk me out of the color scheme I had in mind; he couldn't bear to see me go wrong."

Six or eight dealers in paintings in one block and as many more in the next. There are as many picture shops in Munich as there are drug stores in Cleveland. I can easily see who paints them, but what is beyond me is who buys one-tenth of them. When it is not a picture dealer using good space it is probably a merchant of old furniture, or of reproductions—they tell you very frankly whether they are old or new.

## Medieval Armor While You Wait

THEY make very wonderful ancient armor, full suits, battle-scarred if you specify. Reasonable, too; almost anyone can afford a set of ancestral, metal clothing in the front hall at their prices. Right now there is something of a boom in ships' models, three or four centuries old. The town was sold out of "Mayflowers" when I was there; "Santa Marias" are second in demand. I expect to see ships' models a part of every American household, as the bioscope was thirty years ago. Theology students will be selling them from door to door in vacation to make their way through the seminary.

However prosperous the city may have seemed to me, a visitor, the business men said they had had a bad year.

"The buyers from other countries have not been here and it's too late for them to come," one told me. "Our prices have been too high, for one thing. We have tried everything to attract the foreign buyer and the tourist, but the year has been a failure. Nothing indicates it more definitely than our music and opera festival. After a year of preparation with almost as much time for advertising it all over the world, the audiences were made up of our own citizens with a sprinkling of professionals from other countries. When we sell our merchandise in Germany it means long credit and nobody is in position to give it. Our only chance for real money is from the outsider and he stayed away. It looks like another hard winter."

The opera house, built shortly before the war, is small, so far as the auditorium is concerned—only 1,200 seats, all on one floor, with no boxes on the sides. But every seat



is a good one. The orchestra is hidden and during the performance the auditorium is in total darkness. I heard "Tristan and Isolde," which the critic for the London *Times* praised in highest terms. What impressed me was the subdued tone in the whole production, orchestra, scenery and acting. The musicians never seemed to strive for volume; the stage settings and costumes were in soft colors; the singers seemed interested in quality rather than force. In the second act, the love scene of Tristan and Isolde, the stage was almost dark with the two figures hardly discernible. Tristan did not wrestle with Isolde. Isolde did not pull and haul Tristan up and down the stage. It was a production I wish every opera manager in the world could have seen. I asked my friend in Munich who was responsible for this revolutionary example of good taste in staging, conducting, singing and acting.

"You noticed the softening, the subdued in it, did you?" she said. "No one man is responsible—it's the result of what has happened to the Germans. It's a new spirit that has come to all of our painting and architecture as well as music since the war. I believe it indicates the change in the German cosmos more than anything I could tell you."

That sounded interesting and reasonable and I was willing to accept it—did accept it until the next week when I went to a play, all ready for another example of toning down. What I got was as fine a demonstration of ranting and shouting as I have heard since the long ago days of the lamented Robert Downey in "Spartacus," when he exploded, "Ye call us sahaves, and well ye may!" After that line there were always two or three run-aways among the hacks standing outside of the opy house.

No, the soft effects of the Munich opera have not yet penetrated to the German theater; nor do I think they are necessarily a reflection of the postwar change in the national character. I am sorry, too; it was a nice idea.

#### Proud, Clean and Orderly

THIS south German capital has a charm that is absent in some of the sister cities. It is a proud city, but with this pride goes also a conspicuous self-respect. The streets, buildings, shops and public places are clean and well maintained, as are those of many other communities. But Munich goes where others do not follow. The streets are clean at night—clean and safe. Night life is not favored here; the Munchener still believes that home is a good place after half-past ten. Have a good time, yes, but be decent about it.

A Nationalist meeting was advertised to observe a national holiday of the pre-1914 time, a victory in the war of 1870-71. Of course, I had no business there, so I bought a ticket early and near the speakers' platform. I expected a counter celebration on the part of the radicals and was fully prepared—identification card, passport, instructions about shipping the body—to having a paving block bounced off my head. It was held in a great hall, adjacent to a brewery—breweries all have handy convention halls as part of the plant. Everybody sat at long tables where beer, or coffee, and food could be ordered.

The principal speakers were Otto von Bis-

marck, grandson of the Bismarck, and Count Bothmer, commander of the Bavarian army in the World War. A third of the audience consisted of women. Several tables were lined with ex-officers, all in full uniform, with decorations and sabres. Bismarck, who spoke first, is a dark, fat little man, horn-rimmed glasses, with a rather shrill voice and a way of interpolating, "Now, Ladies and Gentlemen" between every sixth and seventh sentence. He is a member of the Reichstag and head of a young men's national league of modified monarchistic tendency. His theme was that the future of Germany was in the hands of the young men and women and that they could accomplish anything only by looking forward. He read most of his address, which was of a mild, professorial nature. I may be permitted to say here that there was nothing about the grandson—nothing—to suggest the grandfather.

#### Toe Holds and Sangerfests

NEXT came the young man who read a poem, original, I think. Music and then the former Bavarian field marshal, perhaps 70, white of hair and beard, spare figure, in spite of his full uniform, looking much like an old-fashioned Congregational minister.

He put on his glasses and read about the days of 1870. Almost his only reference to the present was that the hardest blow of the Versailles treaty was the clause forbidding a system of universal military service in Germany. By that, he said, the German people were deprived of teaching their youth the principles of duty, service and discipline. I asked a man sitting next to me what form

From somewhere he produced a pocket comb and ran it through his black, silken hair, before making the jump. No one attacked him.

In Osnabruck, a city in western Germany, I saw a poster announcing a grand evening of "box-fighting" and wrestling. The first event was a song, "At the Mill," by the Mannerchor. Next, middleweight box-fight, number of rounds not stated, followed immediately by the men's singing society giving "Whispering Forest." After that, athletic poses. I had not the heart to read any further. Some day I hope to see some fistic promoter put on an "evening" in America with a singing society coming on between bouts.

By 10 o'clock the meeting was over, the ex-officers in their brilliant uniforms, swords and helmets, climbing into street cars and digging under their long gray coats for their fares. It had all been quiet, peaceful, dull toward the end. But I had seen a mass meeting of those called reactionary.

As for Munich, if I were sentenced to Germany, I would ask the judge to designate this pleasant old-new city, with its music, its museums, libraries and its friendly, well-conducted people, as my place of confinement. Either that or I should not serve my term.

Now, on to Berlin, again through a prosperous country with everybody at work. They are working in Germany.

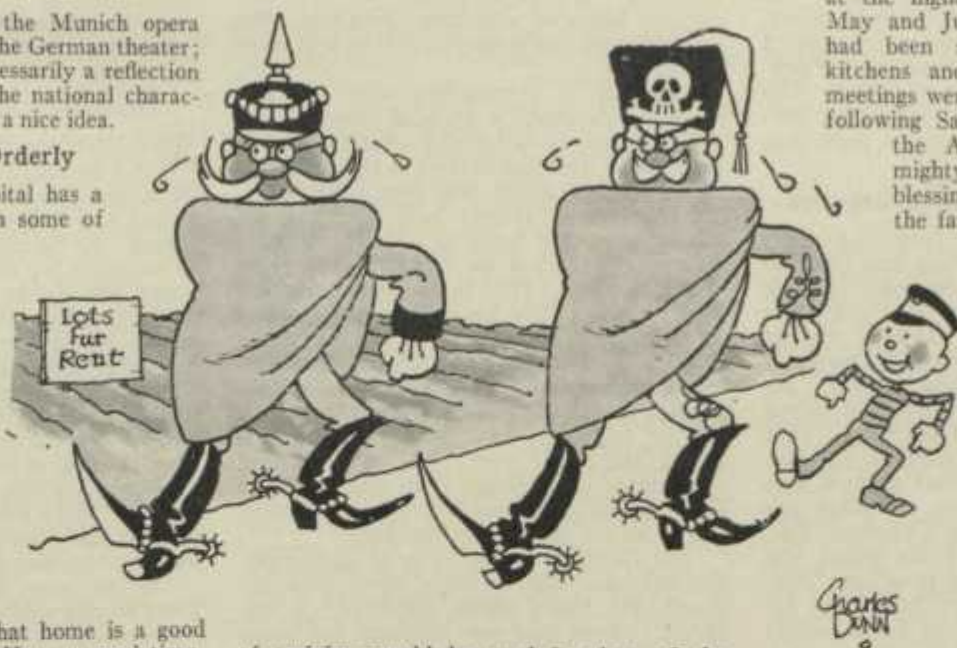
Frankly I cannot be just to the capital of the German republic. The train arrived at 10 at night and I had been reading a Nurnberg paper with a review of the work of the American committee for the aid of German children, here known as "Amerikanischen Komitee für deutsche Kinderhilfe," announcing a public meeting of gratitude. It said that at the highest point of the work, in May and June, 1924, 1,119,000 meals had been served from 374 central kitchens and 4,493 branches. Public meetings were to be held at noon on the following Saturday to offer thanks "to the American people for their mighty rescue work, so rich in its blessings." And then I landed in the famous city of Berlin.

#### Berlin Night Life

AT THE hotel a manufacturers' association was having a public dinner where the president of the republic was to speak. Men and women in evening clothes, a great dining-room lined with tables—music and flowers. Perfectly proper; you would not expect them to wear overalls and eat at a lunch counter. Six years since the war ended! Still, I had

just read that Nurnberg report and I decided to go up the street for the dinner they did not serve on the train.

Two blocks away, Friedrichstrasse, and at night. A mile of restaurants, cafes, wine rooms, cabarets, dance halls, flash theaters, transient hotels and processions of young girls—scraggly furs and sheer stockings—padding along with a glance for every passing man. Barkers in front of restaurants, cabarets and theaters; next performance at 12 o'clock, this ticket will admit you free. The Black Cat, Moulin Rouge, Montmartre, Maxim's—everyone guaranteed an imitation of the real thing, anyone could be transferred bodily to a shack oil town or mining



of training would be used in place of the old compulsory service.

"Athletics strongly organized," he answered. "We have always had our gymnastic societies, but now we are going in for football, boxing and track athletics for the young people and are trying to apply your American system of training gradually. Your training system means discipline and self-control and self-denial. It comes at the right time in a young man's life. It will do something to replace what we had in our military training."

All Europe is going in for athletics, but it's going to take time. In Florence I was looking on at a track meet. Event: high jump. As one contestant's number was called he trotted out in regulation track costume.



camp and feel himself thoroughly at home.

"There's no money loose, then who supports this night life?" I asked an American who lives here and knows Berlin.

"No one. It's not supported. It's busted and knows it," he said. "Go into any one of those places of wild enjoyment, one of those midnight second performance theaters. You'll go alone, so far as I'm concerned. The merriment brings me to tears."

"How do they exist?"

"That's another Berlin puzzle I haven't solved. Cheaper to run than to close up, I suppose. It's the dregs—the scrap of Berlin's night life in the big days before 1914."

Yes, I went. Vaudeville with a dancer "formerly of the Royal Opera" as star, a beauty ballet and "the funniest man in Berlin" heading the comedians. The audience sat at tables, in number almost as many as on the stage. Most of them appeared to be there for a rest. The dancer, "formerly of the Royal Opera," was an unhappy old lady; the comedian showed that he considered the situation hopeless. At the intermission everybody was invited to go to the bar and dance, and nobody went. It was, all in all, as merry as a creditors' meeting or a surgical operation.

The Germans are the great students and teachers of modern psychology. Strangely, they do not apply it. This chunk of mining camp life in the heart of the city can only give unpleasant impressions to the visitor and have bad effect on the Berliners themselves. Certainly, it can in no way be of profit to the community. Why let it exist? What a chance for a real clean-up mayor in that town. And how the people—the 99 per cent—would thank him after the first year or two of abuse. The effect on me, average tourist, was to have me plan to shorten my stay; I thought longingly of Munich and of the public thanksgiving meetings in Nurnberg. Ungracious of me, yes. At the same time Berlin is not fair to itself; it puts its worst foot forward.

#### From Christmas Trees to Cabarets

FIFTY years ago it was a provincial capital with the only visitors those who came on business and Russians stopping over on their way to Paris. William I, a quiet old house father, with beautiful side whiskers, who let Bismarck and Moltke have full charge of the operating department, was emperor. He used oil lamps in his work room and turned down the wick when he left the room. Half the court walked to the opera in galoshes. Eleven o'clock was late. State dinners were served at 5 in the afternoon. Berlin's one great day of the year was Christmas Eve, when the plaza in front of the palace was brightened with Christmas trees and hundreds of candles. The town turned out for the great sight and joined in carols before going home.

With the creation of the empire in 1871 the new capital began to boom, but much of the old simplicity remained until the last kaiser came to the throne and almost overnight Berlin decided to be "cosmopolitan," meaning wide open—in one jump from Christmas trees to cabarets, from 5 o'clock dinners to 5 o'clock breakfasts. Personally, I have a right to the opinion that the German tore a ligament or bowed a tendon in that leap. He was never built for that kind of athletics.

Berlin today is not an attractive place. It is a thoroughly commercial city built around and between parks and palaces. The architecture is heavy, much of it in the modern German lines suggesting massive fortresses. All of it is gray. With a garrison

of 50,000 beautifully uniformed troops parading on all occasions the somberness was relieved. Today there are neither troops nor the glitter that goes with an imperial court. It's like a theater with the scenery set, but lacking actors and orchestra and footlights. A sad sight.

As for business, everybody is busy looking for it.

"I can sell this stock in a week if I'll give credit, but I can't get money for anything," a merchant told me.

I had priced a hat in a shop around the corner—six dollars. In this man's window I saw the same kind for \$4.25.

"We have no price standard," he explained. "When we suddenly changed from a billion marks as a unit to the one mark Renten basis, we couldn't bring ourselves actually to mark down in the same proportion. I am probably too low, and the other fellow is too high. I know. We haven't orders to liquidate stocks. I honestly don't know what my goods are worth, but I do know that I can't get real money for them."

#### The Impatient Bill Collector

AN AMERICAN woman in Berlin told me she had bought a coat on her way to the train, but was twelve dollars short of the price. The merchant told her to take the garment and pay the balance on her return. When she came back a week later, she was told that a man was downstairs to see her on an urgent matter. It was the collector; he had been there since 8 in the morning. She paid him, but protested about his anxiety and impatience.

"Madam," he said, "it isn't anxiety—it's necessity. We go whenever we have the slightest hopes of collecting something. We actually need this money today to help meet our payroll."

"Germany is overstocked with manufactured merchandise," a financial man told me. "There is money—a lot of it—but it is not in circulation. Our instructions to customers are to move their stocks and take their losses. The big houses started long ago, but the smaller ones still hope to realize something above costs and ask for credits to tide them over meanwhile. How in the world can they figure it when they know they have to pay 25 and 30 per cent interest? It's our policy to try to carry those who are earnestly meeting conditions, but at the same time we are drawing in steadily. In this bank here" (it was an important branch of an institution known the world over) "we have reduced the number of employees from 200 to 120 in eight months and there will be further cuts, just as we are cutting our business."

"But Germany seems to be in such excellent physical condition, cities, farms, factories, streets and roads, public buildings," I suggested. "Even now new buildings and shops are going up, all of the most substantial character. On the surface the country appears to have money."

"It has money. There's a lot of stocking money in Germany," he said very frankly. "What it lacks is credit—credit abroad and at home. That's what must be reestablished."

"What about the financial conditions of Germany as relates to its internal debts?" I asked. "By the depreciation of the old mark you have relieved yourselves of every internal public debt, national, provincial and municipal. It seems to me that alone places you in a better financial condition than that of any other European country."

"Yes, if we want to sacrifice any chance of regaining our credit," was his answer. "If the German people as a nation hide behind

the depreciation of the mark in order to wipe out their honest debts, then they are repudiationists and will have to pay for it indirectly in the long run. The present government passed a law providing that debts wiped out by depreciation shall be paid on a basis of 15 per cent of the face by 1930. Is that paying honestly? Why shouldn't the next government in power change it to 10 per cent, or 5 per cent or nothing? Germany is in position to pay its honest debts and to meet the reparations. That's the task that is ahead of it and the sooner the people and the government accept the situation the nearer we'll be to sound conditions."

"The German is a saver; he's by nature a property owner. Millions of our people put their savings in government, state and city securities. Now they're offered 15 per cent as settlement. Are those people going to believe in government? We are now asking the people again to turn their savings over to the government. They are putting it in their socks."

"The Dawes plan is the beginning of Germany's opportunity to reestablish its credit before the world. That same plan slightly modified could have been carried out by Germany itself three years ago had people confidence in their government. And at 6 per cent! How? By means of a national mortgage on lands, at 10 per cent of the value. No one would have felt it and we would have been two years farther on our way to stability. The money could have been raised in Germany. It's here and it will come out when we show that we intend to pay a hundred cents on the dollar at home and abroad. The world knows we can work. Work and a reestablishment of our reputation for honesty—that's credit—will bring us back."

My only comment is that his attitude surprised me.

#### Germany's Drag with the Stork

AND THEN to the country. I spent a week in a farming community a few miles from the Dutch border. Two of the farmers I visited were building brick additions to their houses. All seemed prosperous and content, all worked from daylight to dusk. A Stinnes power line ran through the district and the farms I stopped at had electric lights with motors for washing machines and farm mills. And large families!

An American acquaintance in Berlin is slightly crazy with the idea that the Germans have discovered the secret of pre-determination of sex.

"Don't you take my word for it," he protested. "Make your own inquiries and you'll see that this country is raising boys since the war—nothing but boys."

The inn-keeper in the village of 800 where I was staying said something about his family one evening.

"How many children have you?" I asked.

"Twelve—nine boys and three girls."

The next morning I stopped at a farmstead. "You brought me luck," was the farmer's greeting. "Just three hours ago a new boy came into the house."

"Congratulations! How many does that make?"

"Six boys and one girl."

After that I quit asking. I do not want to be tempted to join my friend in his delusion.

**Editor's Note—**The next stop is Venice! In the January issue, Mr. Schott writes of the ancient city of the doges and of the movement that is on foot there to displace the storied gondolas with modern sea-going taxicabs.



tural conference on the advice of some of the leaders in the farm organizations. But I stand committed to this proposal. I believe it holds out the best promise of a wise solution and the best method of a substantial agreement among the farm organizations themselves of what they desire in the way of government action.

I therefore propose to call such conference, to consist of some of the leaders in the farm organizations and some of the prominent representatives of farm economics in our agricultural colleges, to formulate a program for legislation to be presented to the Congress which we can all support. The farmers have suffered enough from those who have attempted to barter their votes for unsound remedies. I want their business put on a sound basis by thorough and scientific study, where it can exist on an equality with others.

What we may hope for in this direction is illustrated by our present foreign trade. In 1913 both imports and exports were but

### Where Government Can Help

\$4,200,000,000. After the war the trade of the whole world collapsed, but we have brought our foreign trade up to about \$8,000,000,000. Translated into pre-war prices this would be about \$5,200,000,000. On the same basis, in 1923 Great Britain shows a decrease of 12 per cent, France 14 per cent and Germany 51 per cent, while our increase is more than 19 per cent. In 1913 we had less than 11 per cent of the foreign trade of the world; now we have nearly 17 per cent. This has been promoted by the activities of the Department of Commerce in finding markets for farm cooperatives and small concerns. Inquiries in this field have risen from 700 per day to nearly 7,000 per day. This is a natural, sound, common-sense way of dealing with industry, which may profitably be employed in further dealing with agriculture in the matter of finding markets.

When we look for an example of benefiting consumers, we shall find it in the bituminous coal industry. Three years ago there were about 9,000 mines, or 30 per cent more mines and miners than could be given regular employment. The Department of Commerce found there was need of more cars, more summer storage and more industrial peace. These have been accomplished, with the result that while in the profiteering period of 1920 run-of-mine coal averaged \$5.64 a ton, notwithstanding the strike of 1922, it averaged \$3.67 per ton, and for the year ending June 30 it averaged \$2.23 per ton. This industry has been organized, but not monopolized; it has between 7,000 and 8,000 competing mines, and no person or group controls more than 2 or 3 per cent of the production.

It is impossible to escape the conclusion that the general economic condition of the country is good. While business and agriculture have not fully recovered the losses caused by the world-wide depression which always follows war, they are now on a fairly profitable basis. It would be natural to suppose that every well wisher of the country would be anxious to maintain the present established order of things, which has given to the people

of America a position superior to that ever before held by any people on earth. But in spite of the extraordinary results which have been accomplished, there is not only a large amount of criticism, but proposals are made to institute at least two of the most revolutionary changes.

It has always been the theory of our institutions that the people should own the government and not that the government should own the people. James Otis stated this principle before the Revolution, when he said that "Kings were made for the people, and not the people for them." This policy cannot be maintained unless the people continue to own and control their own property. The most important property of the country is transportation and water power. It is not only very large in amount, but is of the greatest strategic value.

### Let Us Avoid Government Ownership

It is proposed that these properties should be brought under public ownership. Responsible public commissions have valued these at about \$35,000,000,000. Such a cost would more than double all our public debts. Any deficit in earnings would have to be made up out of taxes. We did that during the war at a cost of \$1,600,000,000.

With the Government in possession of such a great engine, with two and three-quarters millions of employees, spending \$9,000,000,000 or \$10,000,000,000 each year, holding virtually the power of life and death, what chance would the rest of the people of this country have? It would appear to be perfectly obvious that if these properties are taken off the tax list by public ownership, the other property of the nation must pay their yearly tax of some \$600,000,000. In the thinly settled agricultural regions this would make an increase of 30 or 40 per cent on local taxation.

They have government ownership abroad. It takes twenty-three men in Germany to move a ton of freight one mile, twenty-four men in Italy, thirty-one in Switzerland. In the United States it takes only five men. It is interesting to note also that, reduced to terms of bread and butter, railroad employees in these countries show weekly earnings of only about one-third of those in this country. Measured by our experience, by efficiency of service, by rate of wages paid, we have everything to lose and nothing to gain by public ownership. It would be a most perilous undertaking, both to the welfare of business and the independence of the people.

Another principle in which the American people have always strongly believed, and which they have stoutly maintained, is a judicial as against a political determination of causes. When our Constitution was adopted it established the Supreme Court of the United States to be the very citadel of justice. Its members are appointed for life in order that they may be devoted entirely to the admin-

istration of justice according to law, and as independent and impartial as it is possible for men to be. One of their chief duties is to protect the rights of the individual. Our Government is anything but absolute.

It is strictly limited. It has only those powers which are conferred upon it by the Constitution. That Constitution distinctly declares that the President and the Congress are prohibited from doing certain things, the central thought of which is that no one shall be deprived of life, liberty or property without due process of law. There is provision against unlawful searches and seizures; in order that the people may be secure in their persons, houses, papers and effects, also against making any law respecting an establishment of religion or abridging the freedom of speech or of the press, and including the right to trial by jury, with many other provisions for the protection of the individual from impositions which other governments had constantly inflicted upon them. This is in accordance with our theory that the people are born with certain inalienable rights which no government should have any power to take from them.

The same privileges that belong to the individual are likewise guaranteed to the minority and to the several states. We have made

### Power Wisely Invested in Supreme Court

our Constitution the supreme law of the land, and whenever the Congress or the President or a state legislature or governor violates it, anyone who is injured has the right to appeal to the Supreme Court and have such violation prevented. What better method could there be for preserving the rights of the people and of the states? It is not necessary to prove that the Supreme Court never made a mistake. But if this power is taken away from them, it is necessary to prove that those who are to exercise it would be likely to make fewer mistakes.

It is proposed to place this power, which, it must be remembered, is that of life and death, in the hands of the Congress. That would give to that body power to violate all the rights which I have just mentioned, the power to destroy the states, abolish the presidential office, close the courts, and make the will of the Congress absolute.

Is it supposed that in the exercise of this power they would be more impartial, more independent, than the judges of the Supreme Court? It seems to me that this would be a device more nearly calculated to take away the rights of the people and leave them subject to all the influences which might be exerted on the Congress by the power and wealth of vested interests on one day, and the passing whim of popular passion on another day. The poor and the weak would be trampled under foot. Under such a condition, life, liberty and property, and the freedom of religion, speech and the press would

have very little security. In time of national peril our Government would have no balance wheel. If this system should be adopted and put into effect, the historian would close the chapter with the comment that the people had shown they were incapable of self-government and the Republic had proved a failure.





# The NATION'S BUSINESS

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MERLE THORPE, Editor

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## And He Wants More Regulation

A SHOE dealer, an intelligent, thinking man in a middle-west city, writes to THE NATION'S BUSINESS that the curse of his industry is sudden style changes. With this diagnosis we have no desire to quarrel. He probably knows what he's talking about.

But with his cure for the disease we cannot agree. Here's his remedy:

Do not permit any shoe manufacturer selling to shoe retailers to have more than four selling seasons per year.

Designate the selling seasons to begin February 15, May 15, August 15 and November 15.

Do not permit more than fifty styles to be shown in any line of shoes or oxfords or slippers for men, women or children.

Do not permit the addition of any samples to any line, during or between any selling season, neither permit any changes made in any sample or pattern shown at beginning of each selling season. (This is the all-important part to bring about the adjustment desired.)

Demand that full details and description of every sample be forwarded to the proper department in Washington the first day of every selling season.

Make it a heavy penalty for any manufacturer to violate; or better still, make it a penalty for both buyer and seller to violate this law.

Have the Government employ several well-experienced shoe men as auditors, whose duty it would be to check up the manufacturers the same as a bank examiner.

If legislation to comply with this plan can be enacted, it will place the entire shoe industry back on a safe and sane basis and will create a fair and unprejudiced competition among all manufacturers and retailers.

Call upon Congress to pass a law! That's the ever-ready remedy for every form of business ill. In the name of common sense, can't shoe manufacturers and shoe sellers get together and agree on limiting styles if that's what's wrong with the shoe business?

And think of another government commission to limit styles and of government inspectors to watch for violations of their regulations! And haven't we enough trouble with law-evaders now without women taking to the wearing of bootlegged fashions in shoes?

## Some Comments on Distribution

THE Chamber of Commerce of the United States has decided to hold a conference on distribution, seemingly a subject of widespread interest and some clashing opinion, as witness these bits of debate and comment at the meeting of the board which authorized the conference:

DIRECTOR A (who knows a great deal about manufacturing agricultural implements, but less about packing and selling meat products): I raised some fine lambs and the best I could get for them was 14 cents a pound. Yet when I went to buy lamb chops from the same butcher, he charged me 72 cents a pound, a spread of 58 cents.

DIRECTOR B (who may not know much about agricultural implements, but should be an authority on the packing and sale of meat): That's all right. You should remember that lambs aren't

all lamb chops. If you would raise lambs that were all chops, you could get a lot better price for them than 14 cents a pound.

DIRECTOR C (who knows a great deal about finishing cotton goods): Well, I know this: I use a great deal of talcum powder in my business—not perfumed, of course—and it costs me \$16.00 a ton. My wife buys talcum powder, too, and I figured it out the other day that, getting it the way she does, it costs her \$1,330 a ton.

DIRECTOR D (an expert on construction work, but without repute as a farmer): Well, we have oranges on our place in California and all we got for them was 13 cents a dozen. But when my wife bought oranges in Los Angeles, they were 75 cents a dozen. And I'm told that the California citrus fruit growers have the best marketing organization in the world.

Obviously, even among these eminent business men, who make up the Board of Directors of the National Chamber, there are several points about distribution that need explanation and clarifying.

## Matching Men With Money

THE U. S. Census Bureau has figured at nearly five thousand dollars the average investment of capital per worker in industry in this country. In other words, there must be half a million dollars in plant machinery, material and money for every hundred men employed. Here are the figures in detail:

All industry .....	\$4,888
Textiles .....	3,783
Iron and steel .....	5,494
Lumber .....	3,075
Leather .....	4,358
Food .....	6,740
Automobiles .....	4,886

It is interesting to note that automobiles constitute in this respect the average industry, but it is not easy at first thought to understand why iron and steel should take so much more money per man than textiles.

## The Perfect Tribute to Civilization

FEW THINGS so startle the traveler when he reaches New York from the bucolic quiet of Washington as the armored cars which chase about the streets, presumably with loads of treasure. The comment on our post-war civilization is obvious, but it has not been better phrased than in these two paragraphs from Gordon Strong's summary of papers read at a recent meeting of real estate men:

The saving of money and its placing out for the sake of return is probably the most important factor in civilization. As you know, it is only two or three centuries ago when it was not safe to place money out at all, for whatever return. The only safe thing to do was to put it in a stocking, put the stocking under a loose board in the floor, pull the bed over the loose board, and sit on the bed with two horse-pistols and a blunderbuss. To have money involved a sedentary life.

Now, but a comparatively few years later, here in Chicago we can send a mere child with five hundred dollars to bank in the heart of the city and with the utmost security—provided the bank calls for him with its armored car and four armed guards, and provided, of course, that the entire transaction is adequately covered with life, health, accident, burglary, robbery, holdup, general liability, automobile, theft, fire and marine insurance. The money will be perfectly safe—which shows that we are perfectly civilized.

## Trying to Cut Out the Click

SCORES of engineers have been working for years to eliminate the perpetual click that accompanies fast passenger trains on their journeys.

Rails expand in summer and contract in winter. Allowance is made at the joints for this change. The ends of the rails are also the first to deteriorate. Heavy, fast trains ham-



mer the joints. As a result the passengers hear the continual click and the railroads spend fortunes each year replacing the rails.

There are twelve file boxes in the Patent Office each containing an average of seventy patents that have been granted for a "new and useful device to eliminate the hammering of rail joints and the removal of the click when the wheels strike the joints."

Drawings accompanying these patents look like the pictures we see of all the knots made by sailors. The rails are spliced together in every conceivable manner. Many of these devices have been tried but none, apparently, has proved practicable.

Naval officers tell about a midshipman who was bright but inclined to be flippant. In an important examination he wrote this answer to a question: "The action resulting under the circumstances was due to the inherent cussedness of inanimate objects."

If you are ambitious to remove the click from the railroad train, therefore, and thus win a fortune, don't forget the cussedness of inanimate objects, and, also don't forget the 800 patents already buried in the Patent Office.

### Give the Public Its Chance

**H**ERE IS the way A. B. Garretson, ablest leader the brotherhoods have produced, described the state of the public when railroad employer and railroad employe fell out:

Many years ago I ran a train down in the country below the Rio Grande, where the vulture is a sacred bird. When we struck a cow with the pilot of the engine and conducted her to her eternal resting place, you would see specks appear. They were gathering where the carcass was.

The public is the carcass, and there seems to be an assertion here of an inalienable right of everybody represented—and I will take our share—to pluck the carcass. We were putting it into them on the basis of an increased wage for our men. The railroads are putting it into them on the basis of increased freight rates, and the shipper is saying in one breath that he could not pass it on to the public, and having spasms on account of it, and in the next breath saying in the last analysis the public will have to bear it, which is absolutely true.

To guard that public the Transportation Act set up the Railroad Labor Board, on which the public is represented and whose hearings are open to all.

Still on the Congressional calendar is the Howell-Barkley Bill to abolish that board and to provide a method of settling railroad labor disputes which takes no account of the public's interest in such disputes and which denies to the public its right to know and to understand the question at issue.

The bill is a step backward, and the Congress which meets on December 1 should defeat it. Give the Railroad Labor Board a chance!

### Another Witness Is Heard

**L**AST MONTH on this page we printed a contribution by Secretary Hoover to the case against government ownership. This month we add more testimony. The witnesses we summon are members of a committee of engineers and public men under the chairmanship of Lloyd George, formed to draft a plan to solve the British coal mining troubles, but it greatly broadened its recommendation. For these excerpts from its report, we are indebted to General Guy Tripp, of the Westinghouse Electric Company:

Experience is overwhelmingly against the successful administration of a business enterprise by a bureaucracy.

Producing commodities is a function we believe the State to be utterly unfitted to perform successfully.

There is a common notion that the State can get capital on cheaper terms, or bear the losses resulting from unsuccessful management. This we believe to be a pure delusion.

Our present proposals (to develop a nation-wide electrical system)

place the whole executive management in the hands of private enterprise.

If it is found that vested interests, that is, municipal powers, are prepared to block the way (of electrical development) the line must be cleared and the Electricity Commissioners must have power to effect the clearance.

Whether we make the right use of this heaven-sent opportunity for redeeming the mistakes of the past (by the use of the new power) depends upon whether we use from the outset wise methods of regulation and control without sacrificing the driving power of private enterprise.

### Industry Moves Westward

**D**ECENTRALIZATION of industry may or may not be going forward, but a variety of interesting facts are coming to light. The "center of manufactures" has actually been making its way westward more rapidly than the center of population, even though the latter by reason of getting under way earlier is in southwestern Indiana while the former is approaching the western boundary of Ohio.

In the nineteenth century our tendency was toward concentration of manufacture in larger establishments, but the data collected by the Census Bureau are declared not to support any theory that since 1900 there has been a tendency for manufacturing establishments in general to increase in size.

This is one of the conclusions reached in a study of the "Integration of Industrial Operation" in the United States recently published by the Census Bureau. The study is an attempt to bring together and analyze the material gathered in censuses of manufacture, so far as it bears upon tendencies in American industry in general and also as it shows what has been occurring in some of the larger branches of manufacture.

### Building and Mechanics and Kings

**N**EVER in the world's history has there been building activity such as now reported in America, according to Professor William A. Boring, director of the School of Architecture at Columbia University. The professor believes that precedent is influencing every kind of structure from the Lincoln Memorial to the California bungalow and the handsome homes of the middle west.

Our mechanics, he says, "enjoy the comforts denied the King of England when the precedents of our popular domestic homes were in the making." And he is right. The precedent makers have done rather well by the mechanics, and like as not, that report that "uneasy lies the head that wears a crown" had more reason to fear from the state of the plaster than from the state of the realm.

### Neatness and Honesty Always Were Twins

**F**OR SIXTEEN years Jim Gant, negro janitor, had been on the level with the Kentucky bank where he wielded his broom. One day recently he got away with five bundles, each containing \$500 in bills.

"I was just sweeping round behind the teller's desk," said Jim, "and these packages had fallen on the floor. I picked them up. And then I just didn't put them back on the shelf, that's all."

There is a curious relationship, to which the "Help Wanted" advertisements have long testified, between neatness and honesty.

Money squarely stacked on the shelf was inviolate to Jim Gant. Money strewn on the floor said "Take me."

Dust and dirt, they say, are merely matter out of place. When everything about us is orderly, and all things put where they fit, our minds are tranquil and our morale under no strain. The old slogan of the housewife, "A place for everything and everything in its place," is a mighty influence for preserving the rights of property and keeping the conscience clean.



# Who Owns the United States?

SILAS BENT Puts This Question Up to WALTER R. INGALLS, Engineer-Economist

THAT about two-thirds of the wealth of the United States is in the hands of 2 per cent of the population is a widely held belief.

Like a great many other popular myths, this one got along amazingly well until it attracted the attention of an inquiring mind. Then something happened.

The myth exploded with a healthy bang! while the owner of the inquiring mind, Walter Renton Ingalls, gained a reputation, where reputations count, as a pioneer authority on national wealth.

Not so very long ago, when in need of certain facts about wealth and income, I telephoned the economist of a big New York bank.

"See Ingalls," he told me. "He's the only authority on that. If anybody else tells you anything about it, and it's right, he got the information from Ingalls. You might as well go to the source while you're about it."

"And who is Ingalls?" I asked, out of bald ignorance. "An economist or a lawyer?"

"Neither. He's a mining engineer." A glance at "Who's Who" revealed the fact that Ingalls was an international authority on the metallurgy of zinc and certain other ores before he turned his attention, five years ago, to political economy. Since then, he has written two books, "Wealth and Income of the American People" (now in its second edition) and "Current Economic Affairs."

At first, I was told, his findings were taken somewhat lightly, partly because they disagreed with the United States census, which has an authoritative official air. But when his data had been borne out by independent inquiries and verified, the world took off its hat.

## A Popular Fallacy Is Exploded

SO I sat at the feet of this man to learn something about the wealth of this country and its distribution.

"There is a prevalent fallacy," he told me, "that the national income is a definite thing, out of which the rich and strong first help themselves and take the lion's share. Among labor leaders the unfortunate notion persists that an increase in the number of men on the job and inefficiency are beneficial to labor as a whole. This is merely a variation of the prevalent fallacy. It overlooks the truth that the produce of industry is the result of work and that people can get only what they earn. In other words, labor pays its own wages."

"The share of labor is normally determined in the long run by the fact that labor is what is called 'the residual claimant' upon the produce of industry. Labor takes all that remains after the deductions of the shares by

the landlord, the capitalist, the entrepreneur and the state. The state takes its share in taxes. The shares of capital and management are strictly limited by competition. Such inequalities in the distribution of wealth as exist are not between capital and labor, but are between classes of labor itself."

"When the unionized railroad workers get more than their share, it is at the expense mainly of other workers; for the disproportionate wages paid to railway employees go into higher rates, which in turn are reflected in the higher cost of necessities other workers must pay without similar wage increases."

Here was an example of labor's inhumanity to labor. But I wanted to get at that myth about two-thirds of the wealth being in the hands of one-fiftieth of the population.

"With Senator La Follette heading a third ticket this year," Mr. Ingalls observed, "we are likely to hear that fallacy repeated by him and Senator Brookhart and Magnus Johnson and others like them. James A. Frear, Representative from Wisconsin, stated the underlying notion clearly in an interview not long since, when he said that unlimited profiteering had brought about a condition in which 2 per cent of the people owned 65 per cent of all the wealth. Millions of persons, he declared, were scraping out a bare existence, and would approve any effort to

curb or wipe out these inconscionable profits."

"I have no quarrel with Mr. Frear, or any of the so-called radical senators, for entertaining that view. Their belief was founded upon what appeared to them to be good authority. There was in fact official warrant for it. In the final report of the Commission on Industrial Relations, of which Frank P. Walsh was chairman, published in 1915, it was stated that 'the "rich," 2 per cent of the people, own 60 per cent of the wealth.' Mr. Frear, Senator La Follette and the rest of them therefore can set behind their statements the report of an official commission."

## Former Estimate Repudiated

THAT commission, however, was not the original authority for the statement. Dr. Willford I. King, correctly characterized by the Walsh Commission as 'a statistician of conservative views,' made a statement very similar to this in a book of his, but he made it on the strength of inadequate data. He drew it solely from an analysis of estates probated in Massachusetts and Wisconsin.

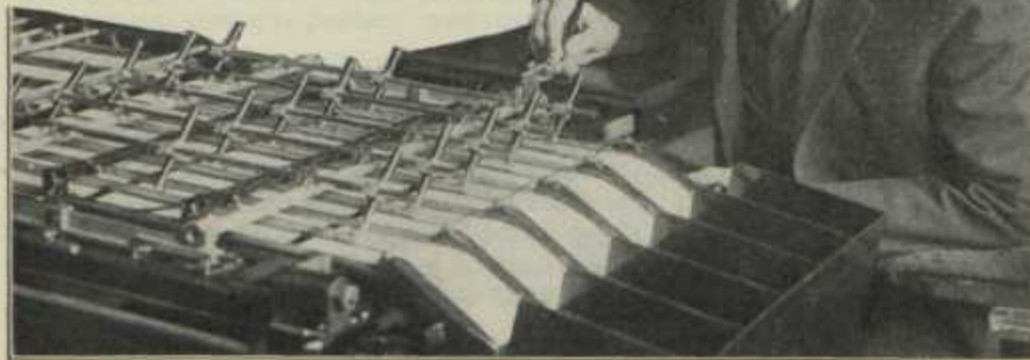
Dr. King, by the way, is now an expert on the staff of the National Bureau of Economic Research, and Mr. Ingalls is one of the directors who pass on the findings of the bureau. The board includes men of every shade of economic thought, nominees alike



ENDERWOOD & UNDERWOOD

**WHO OWNS** the United States of America? Well, just multiply the people in this group—shareholders in the American Telephone and Telegraph Company exercising their priority rights to purchase stock in a new issue—by several million and you'll have a fairly correct answer. They're just common, ordinary folk, too, who've come in person to invest their savings instead of dealing through brokers and investment bankers.

When it comes to paying quarterly dividends to 150,000 or more stockholders, the big corporations find the Signograph, at the left, an invaluable piece of office equipment, signing as it does fifteen checks at a single flourish of the pen.





of the American Engineering Council, the American Bankers Association and the American Federation of Labor. It is an impartial fact-finding organization, and the directors are concerned only with the accuracy of its facts.

Dr. King's misconception, as Mr. Ingalls told me, may lead to grievous political consequences. This kind of thing is the basis of the "soak-the-rich" policy in taxation.

"Dr. King's estimate was made eight or nine years ago," he explained, "when the data available was far less than we have at present. It was based upon a method of computation whose very validity is now challenged. And it is an example of the manner in which unsupported statements catch a certain kind of fancy, and are even perpetuated in governmental reports.

"Now let us see what the facts are. There are two ways of estimating the national income. One is on the basis of production, the other on the basis of income received. Prior to 1919 the reports of the Internal Revenue Bureau on income taxes afforded a fair basis for computation; but since then investment has been driven so largely into exempt securities, owing to high surtaxes, that there has been a wide discrepancy. The income tax returns do not now reveal so large a proportion of our national income as they did a few years ago.

### Where Wealth Is

"IN considering the division of wealth and income between capital and labor, we must exclude the farmer, because he is both a capitalist and a laborer. My investigations have convinced me that about three-fourths of the national income goes to wage earners, and that probably 30 per cent of our wealth is in the hands of the well-to-do. By the well-to-do I mean not the wealthy, but those who in 1916 paid taxes on incomes of \$3,000 a year and upward.

"The public debt of the United States in 1922 was about twenty-three billion dollars, and Treasury experts estimated that there were at least ten million holders of Liberty and Victory bonds. This indicates a wide distribution of the national claim on the wealth of the country. The property of the railways and industrial corporations is widely distributed through stock ownership. At the end of 1922 the Pennsylvania Railroad alone had 140,000 stockholders and 90,000 bondholders, and it is so with many other great corporations.

"Now, if we were to assume that the well-to-do owned three-fourths of all industrial property, three-fourths of all the stocks of goods, somewhat more than three-fourths of all the gold and silver, all the foreign

credits except the Government's, and automobiles, clothes and so on to the average value of \$5,000; that they owned all the rented city houses and apartments, all the state, county

less than half the wealth of the United States. Forty-six per cent is the maximum possibility. The notion that anything like 60 per cent of the wealth is in the hands of 2 per cent of the people is preposterous.

"Yet professional representatives of labor, in spite of the fact that labor receives three-fourths of the American income, other than agricultural, continue to assert that the worker gets a mere dole, say 25 or 30 per cent of what is produced, and should get a fairer share. Pink socialists, members of the Fabian Society and philanthropists, in addition to certain politicians, find it agreeable to support this contention.

"My approach to the studies of wealth in the United States has been wholly from the engineering standpoint. As a consulting engineer I often have had to appraise the widely divergent properties of large corporations. The United States may be compared to a \$30,000,000 corporation multiplied by 10,000. It was on that basis that I began my inquiries. What I found not only challenged the census estimates for previous years but also challenged the theory that the national wealth could be estimated by census methods, either past, present or probably future. I began with the national wealth and income in 1916, and my findings as to income were subsequently verified closely by the National Bureau of Economic Research, organized as an impartial fact-finder. This put the matter outside the bounds of dispute.

### Living Scale Down

"THE findings of that bureau have felled the whole Marxian philosophy. They have dispelled the fallacy about a wages fund and have affirmed the theory that labor gets what it produces and by no possibility can it get any more. They have exploded the contention for a living wage, and refuted the plea for an arbitrary guarantee of a desired scale of living.

"On the latter subject we have literally backed the labor leaders off the boards. Even W. Jett Lauck, who is one of the leading economic exponents of labor organization thought, has admitted that the principle of the guaranteed living wage should be upheld only with respect to a part of the workers. He said that the last census showed some forty-one million persons in gainful occupations, but that only about 17,500,000 were adult male workers. Only to the adult male workers, he thought, should the living wage

principle apply.

"Could anything be more brutal than this proposal to give less than half the workers in the country all they want and let the majority go hang?"

Mr. Ingalls frankly avows himself a believer

## Where American Gold Eagles "Go to Roost"

HERE is a summary of the national, internal, physical wealth of the United States at the end of 1920, as estimated by W. R. Ingalls:

### Owned by the People Generally

Real estate.....	\$15,000,000,000
Highways.....	750,000,000
Canals.....	1,000,000,000
Irrigation enterprises.....	375,000,000
Total.....	\$17,125,000,000

The public owns, in addition, large proportions of the gold and silver, wharves and drydocks, while among private owners are widely distributed the lands and dwellings, automobiles, furniture, clothing and jewels.

### Owned by the Farmers

Lands.....	\$54,903,586,200
Buildings.....	11,287,500,000
Implements.....	1,773,750,000
Live stock.....	7,070,189,000
Total.....	\$75,035,025,200

Farmers also own a large percentage of the automobiles. Their property, however, is estimated to be mortgaged for about four billions. They improved their position during the war, but failed to preserve their gains.

### Owned by Corporations and Business Interests

Mines.....	\$ 3,269,000,000
Railways, steam.....	25,500,000,000
Railways, electric.....	4,000,000,000
Express companies.....	34,691,199
Manufacturing machinery and tools...	15,500,000,000
Meat packing plants.....	350,000,000
Telephones and telegraphs.....	1,800,000,000
Pullman cars.....	150,000,000
Tank cars.....	180,000,000
Petroleum pipe lines.....	608,000,000
Petroleum tankage.....	60,000,000
Light and power plants.....	4,058,000,000
Gas lighting plants.....	1,500,000,000
Waterworks, privately owned.....	310,000,000
Total.....	\$57,319,691,199

Not only is the total wealth of this country greater than that of any other nation, says Mr. Ingalls, but also the wealth per person is greater, and without any doubt its division among the people is more widely spread.

"Contrary to the popular belief," he adds, "the fact is that the business interests of the country paid mainly for the war. The farmers improved their position, as did the small investors, who comprise farmers, the small merchants and the more thrifty among the wage-earners. The real financial tragedy was in Wall Street."

and municipal bonds, all the mortgages on houses and farms (although it is well known that farm mortgages are held mostly by retired farmers, merchants and small trust companies) and at least half the federal bonds, we would still find that they owned



in the competitive capitalist system. He is "further to the right," he declares, than George E. Roberts or Dwight Morrow—using the phrase "to the right" in the parliamentary sense, as opposed to the "radicals" on the left. He denies that this country has grown richer since the war, and doubts whether the scale of living now is as high as in 1913.

"In the years immediately preceding 1914," he told me, "the American people earned an aggregate income of thirty-three to thirty-four billion dollars. They saved annually about five billions, and put it mainly into houses and railway extensions, with some investment in public improvements, factories and mines, and a very small sum in foreign investments. It appeared needful in those days that we should save and invest about 15 per cent of our aggregate income in order to keep the development of our plant, so to speak, ahead of our steadily growing needs.

"Our annual income in 1919 was about sixty-three billions; in 1920, about seventy-two; in 1921, about fifty-five; in 1922, about sixty; in 1923, about seventy-one; a total in five years of 321 billions. If we had saved and reinvested 15 per cent, which we used to find necessary before the war, we should have put back about forty-eight billions into the national plant. As a fact, we have put back only about half that sum.

"Just what we have done is difficult to

determine. We put about fifteen billions into houses and other buildings, and about two and a half billions into railway improvements; prior to the war these were our principal forms of saving. We have put about six and a half billions into public utilities other than steam railways, and about two and a half billions into foreign investments. Under the last head I do not include another billion or so which we sank without a trace of return in German marks.

"Whereas we used to reinvest about 15 per cent of our national income, the rate since the war has been only about 8 per cent, which is probably an overstatement rather than an understatement. The National Industrial Conference Board arrived independently at a conclusion to the same general effect.

"The stupendous post-war figures for national income mean merely that we are still measuring in terms of an inflated dollar. The production of commodities in the aggregate has been but slightly greater than it was in 1913 and 1914, while the production per head of population has been less. Building has been greater in terms of dollars but less in terms of floor space. Transportation has been greater in ton miles, but that has been because we have been constrained to move the average ton more miles. We acquired during the war an overbuilt condition of our industries which resulted in larger personnel

becoming attached to most of them. It was just such a condition that led to excessive production in 1923 and sharp recession in 1924."

"Our whole national economy at the present time evinces unbalances, which explain a great many things. In spite of the belief to the contrary, the fact is we are not working as much or saving as much as we should. A large part of the national income which used to go into the pockets of the thrifty now goes into the hands of wasters.

"We have more automobiles, more telephones, electric lights and movies; and we have enough food; but I do not believe that our scale of living, on the whole, is as high as it was in 1913. Our railway transportation is poorer, and so are our urban and suburban transit facilities. There is still a pronounced housing shortage. Our clothing is probably inferior. In our craze for amusement we have lost some of the substantial things which contribute to the comfort of the people.

"These very things are corollaries of the increasing proportion of the national income that goes to the wage earners and the increasing distribution of wealth, both of which would be highly desirable if they could happen with preservation of the maximum of income and wealth; in fact, they go along with an enormous waste."

## Feed, Don't Starve, Your Railroads

THE ONE-GALLUS farmer, who cultivates half a row at a time with an old-fashioned "bull tongue" instead of getting the weeds out of two rows at once with a modern cultivator, doesn't always follow his quaint and archaic habits of husbandry just because he doesn't know any better. It may be that he never has had enough money ahead or sufficient credit at the bank to purchase modern agricultural implements.

And the one-gallus railroads that haul a 400-ton train with a leaking tin-pot of an engine over a rickety track don't do it merely because they like to operate that way. They probably are in the same fix as the one-gallus farmer, lacking the cash or the credit to buy a good locomotive, build a good track and haul thousand-ton trains over it.

### Rejuvenation Process Painful

IN THIS country, there are one-gallus farmers and one-gallus railroads too poor to economize. There are, too, railroads and farmers that have graduated out of the one-gallus class, others that eventually will be in a position to adopt modern methods, and still others that show no signs of undergoing such a metamorphosis and perhaps never will.

In either case, that of the farmer or the railroad, there is no wizardry connected with the development. It is generally gradual, so gradual, in fact, that it often escapes the notice of the farmer's neighbors and the railroad's patrons.

Occasionally, however, circumstances bring about so sudden and even dramatic a change in the life history of a railroad that the whole process is thrown into high relief. Such circumstances usually involve the painful process of receivership, foreclosure and reorganization, preliminary to the injection of new money into the business. The effect of the new money, or rather the new methods made possible by it, is an increased economy and efficiency so startling that the new regime is

By ROBERT S. HENRY

*Of the Nashville, Chattanooga & St. Louis Railway*

sometimes heralded as a "railroad miracle."

Most of the early railroads of the United States were designed originally to handle light traffic and were built as cheaply as possible. The rails were laid "on top of the ground," grades were heavy, curves sharp, trestles many. Such construction was necessary for financial reasons and adequate for the traffic of the period.

As the country grew and the traffic increased even more rapidly, these early railroads made a profit or didn't. Those that did improve their lines, reduced their operating costs and, in many cases, bought up the roads that did not make a profit. Having acquired them, the stronger roads by putting their credit and financial strength back of the weaker, were in many cases able to turn unprofitable lines that were expensive into reasonable money makers.

There is hardly a large railroad system in the United States that doesn't afford many instances of both these tendencies. It is hard to realize that the present highly developed main line of the Pennsylvania Railroad from Philadelphia to Harrisburg was once a single track affair, following the line of least resistance. But four miles of the present 104 miles of line are still located where the early builders ran it.

At the same time that this original line was being developed the acquisition of other roads continued until today the Pennsylvania System represents more than 600 original transportation corporations. The New York Central Lines are made up of 530. Even so small a road as the Nashville, Chattanooga & St. Louis has acquired eighteen other roads, fifteen of which had been unable to make a living and had to be sold, with consequent loss to their bondholders and stockholders.

While this process has played (and still plays) such a tremendous part in the development of American railroads it is difficult to trace it through the history of the larger systems. It can be seen more clearly by studying the recent history of some of the smaller roads.

Undoubtedly the best known example of railroad rejuvenation of recent years is the Detroit, Toledo & Ironton, control of which was acquired by Henry Ford in 1920. The D., T. & I., under various names, had been starving along for half a century. During the past twenty years it had gone through two complete reorganizations beside its purchase by Mr. Ford. None of the reorganized companies was able to provide the capital, the credit, or the traffic that the road needed.

### The Midas Touch of Ford

DURING the four years of Mr. Ford's control \$9,000,000 has been spent on permanent additions and betterments; the freight traffic has increased from 474 million ton miles in 1919 to 871 million in 1923; and the average revenue for hauling a ton a mile has gone up from .714 of a cent in 1919 to 1.219 cents in 1923. These facts, coupled with the increase in efficiency made possible by better equipment, converted an operating deficit of \$25,921 in 1919, the last year before Mr. Ford took control, to an operating income of \$1,786,924 in 1923.

Even under these comparatively favorable conditions, however, the change did not occur all at once. In 1920 the deficit was \$1,481,000 and in 1922 there was a loss of \$159,000. In 1921 there was an income of \$48,000. In all cases these are operating results, taking no account of fixed charges which must be met from the income shown.

During the year 1921, when operating and financial results on the D., T. & I. began to show improvement, the press began to seek for the "wizardry" behind the results. Mr. Ford, frequently interviewed and quoted, disclaimed



any imputations of being a wizard, but did discuss somewhat at length his plans for the future of his railroad and his views on the running of railroads in general.

His plans, as he once set them forth in *THE NATION'S BUSINESS*, largely revolved around four things—getting rid of the "unproductive stockholder," reducing the dead weight of rolling stock, speeding up the movement of freight, and ridding the road of unnecessary employees. It was indicated that these results were to be obtained by the introduction of plain, everyday good management into railroading, the implication being that "banker control" had heretofore prevented such methods from being adopted.

Mr. Ford's plan for getting rid of the "unproductive" stockholder apparently hinges upon the sale of securities to employees of the road—the principle being similar to that followed by the Santa Fe, the Pennsylvania and other roads with success. No railroad—not even Mr. Ford's—has yet found, however, that this source of investment funds is sufficient to supply its capital needs.

The proposed reduction in weight of rolling stock and in size of trains does not seem to have advanced very far in the four years of the new management. The average train in 1920 weighed 1,535 tons gross and carried 885 net tons of freight. In 1923 it weighed 1,565 tons gross and hauled 839 tons of freight. The thousand new box cars bought last year by the D., T. & I. are 7,000 pounds heavier than the standard U. S. Railroad Administration box car of the same capacity.

The proportion of paying load to dead weight is actually somewhat less in the new D., T. & I. cars than in the standard car. Half a century ago freight cars weighed nearly twice as much as the load they could carry. Today the load is from two to three times the dead weight of the car, while there are special types of ore cars which carry four times their own weight.

Progress along this line will certainly be

continued and freight cars will be built with less weight and less bearing friction than those of today, but if they are to be used in regular freight train service they will have to be built without sacrificing strength or carrying capacity, and without costing too much to build.

All the proposals to revolutionize American railroading by substituting smaller freight cars, somewhat on the European pattern, seem to overlook the vital question of track capacity. For various reasons, this is the limiting factor in railroad operation. The 60,000-pound capacity box car, the standard of a few years ago, is 33 feet long. The 100,000-pound capacity box car, the present standard, is but seven feet longer. The same number of tons hauled in the smaller cars would make a train about one-third longer than if hauled in modern cars.

### The Vexing Yard Problem

**I**F TODAY'S business had to be handled in the little 30-ton cars there would have to be an enlargement of yard capacity of about one-third to take care of it. And yards are the hardest thing about a railroad to enlarge.

The fact that the D., T. & I.'s box cars are of standard capacity and strength would indicate that these factors, long known to railroad operating men through experience, have been recognized in the development of this road.

Much attention was also directed to the matter of movement of freight cars. In newspaper interviews ascribed to Mr. Ford in 1921, he was quoted as protesting that the average daily movement of freight cars (24.9 miles in 1920) was much too small and should be and would be increased several times over on the D., T. & I.

Under the new management the D., T. & I. has shown a gratifying improvement in this important measure of efficiency, until in 1923 its average car movement was 31.3 miles per day, as compared with an average for the

whole country of only 27.8 miles in that year.

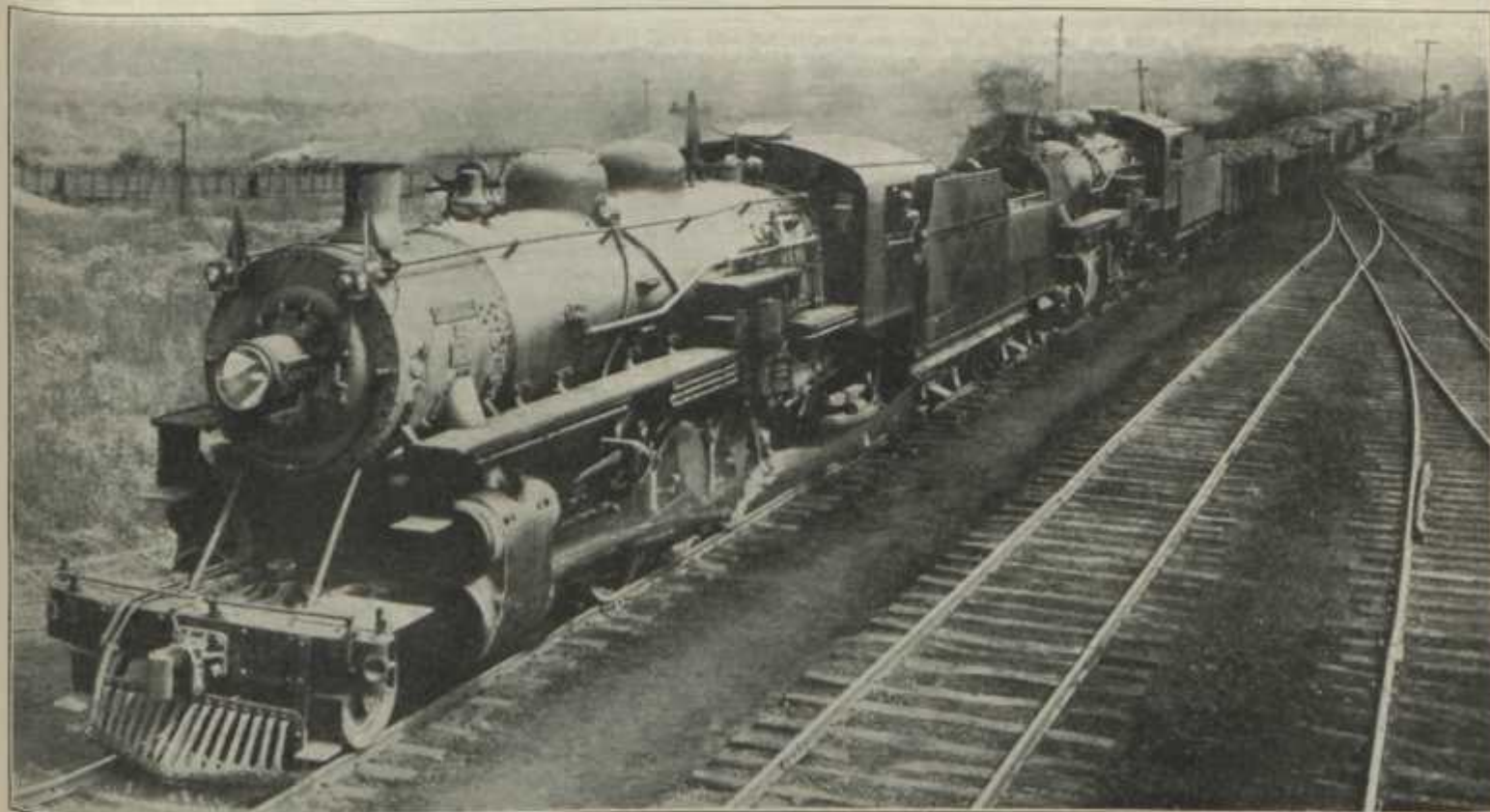
In calculating the anticipated movement of cars on the D., T. & I. Mr. Ford adopted the very common misconception of the meaning of the reported railroad statistics on daily car movement. In computing the movement of the "average car" all cars are counted, including those in the hands of shippers for loading and unloading, and these cars, perhaps, exceed in number those actually moving under load at any given time.

While net train loading on the D., T. & I. has not increased during the past four years, there has been an increase in average freight train speed from 7.7 miles per hour in 1920 to 8.5 miles in 1923. The two factors of net train load and train speed determine the hourly output of transportation service of the average freight train on the road, perhaps the best single measure of comparative railroad efficiency.

This hourly output of the freight train on the D., T. & I. has increased from 6,854 ton miles in 1920 to 7,142 in 1923—an increase of 4.2 per cent, satisfactory but not startling. The increase for the country as a whole during this period was 6.4 per cent.

In worth-while measures of operating efficiency the D., T. & I. has shown fine improvement, but in most particulars the other railroads of the country have shown not dissimilar improvement during the same period. The financial metamorphosis of the road, then, would seem to be quite largely due to the fact that the average revenue received for hauling a ton a mile has increased by about 40 per cent during the past four years, at a time when the average revenue per ton mile was declining on the railroads as a whole by some 12 per cent.

The farmer or the business man located on one of the weaker railroads is experiencing a new sort of fear in America—the fear of being left with a business on an abandoned railroad. That it is a very real fear the files of the Interstate Commerce Com-



Two light Mikado locomotives of the Tennessee Central are shown here pulling a 2300-ton coal train into Nashville. Only when hauling trains like this is the railroad able to make a living, and until new capital was forthcoming to purchase such locomotives and rebuild the track to carry them, the road was forced to operate trains so light that they could not pay for themselves. In fact, only through a constant increase in trainload revenue have American railroads been able to meet the modern costs of operation.



mission, where applications to abandon some hundreds of miles of line are now pending, will show.

To those who want to see in miniature the typical American process of building up efficient transportation through the common-sense use of the tools that invested capital provides, the recent history of such roads as the Tennessee Central or the Gulf, Mobile & Northern is probably of more value even than that of the D., T. & I.

One of Mr. Ford's cardinal points in improving railroad operation, it will be recalled, was the elimination of the "unproductive stockholder." This gentleman never had to be eliminated on either of the roads named, because he never existed. True, there were plenty of stockholders, and they put up a good many millions of dollars for the building of the roads, but they never got any dividends, so I don't suppose they could be called "unproductive" so far as the railroads were concerned. It would seem to be the other way around.

Neither did the bondholders figure much on either road. There were bondholders, lots of them, and plenty of bonds, but as interest was rarely paid the bonds could hardly be considered a severe load, except as they affected the roads' credit.

Both roads, after struggling along for years with inadequate facilities and equipment, accumulating deficits from year to year, were reorganized. The operation must have been painful to the security holders because after the reorganization there was nothing or next to nothing left for them. However, they had gotten used to the idea of never getting anything and were, perhaps, to that extent reconciled.

#### Fresh Money Effects Savings

IN BOTH cases the new companies put up and borrowed money to make improvements. That these new stockholders and bondholders can hardly be classed as "unproductive" is indicated by the fact that the new capital they put in made possible efficiencies and economies that compare favorably with those shown on the D., T. & I.

In both cases, although their average revenue per ton mile has declined instead of advanced, new capital has made it possible to convert the roads from money losers to money makers. In neither case could anything worth while have been done to improve their condition unless someone had been willing to take a chance with his money. In both cases the "unproductive" investor took the chance—not employees.

The Tennessee Central is a mountain line, with difficult grades and curves, serving coal

mines and lumber operations as well as farms and towns. It was built some 25 years ago, absorbing and connecting up certain older properties. After a consistent career of losses it passed into the hands of a receiver in 1909. There it remained, losing a little more every year, until in January, 1922, it was foreclosed and sold to a new company, which paid \$1,500,000 for property that had cost several times that to build but that could not be made to pay operating expenses. In the year before the new company took charge, it cost the road more than 102 cents to take in a dollar, while in other years it had cost

service produced by the average freight train in an hour increased from 2,791 in 1921 to 3,649 in 1923—an increase of 30 per cent.

The final financial result of all this was that the operating income of the Tennessee Central, which had been less than nothing in 1921, became \$99,868 in 1922 and \$366,926 in 1923, although the average revenue for hauling a ton a mile had decreased by more than 10 per cent during that time. Fixed charges have to be met from this income, of course.

The history of the Gulf, Mobile & Northern is not unlike that of the Tennessee Central.

It started as a lumber road, reaching northwest from Mobile. It became the Mobile, Jackson & Kansas City, but it reached none of these places except Mobile. It went through receivership and came out as the New Orleans, Mobile & Chicago—but it still stopped at Middleton, Tenn., and had connections at its upper end only with the Southern Railway, which controlled the Mobile & Ohio, the G., M. & N.'s principal competitor. Another receivership was inevitable.

A new corporation, the Gulf, Mobile & Northern, was organized and took over the road. Money was put up to build it forty miles north from Middleton to Jackson, Tenn., where a northern outlet over three other railroads was obtained.

It made somewhat the same sort of improvements that the T. C. did, improving its track and getting better locomotives.

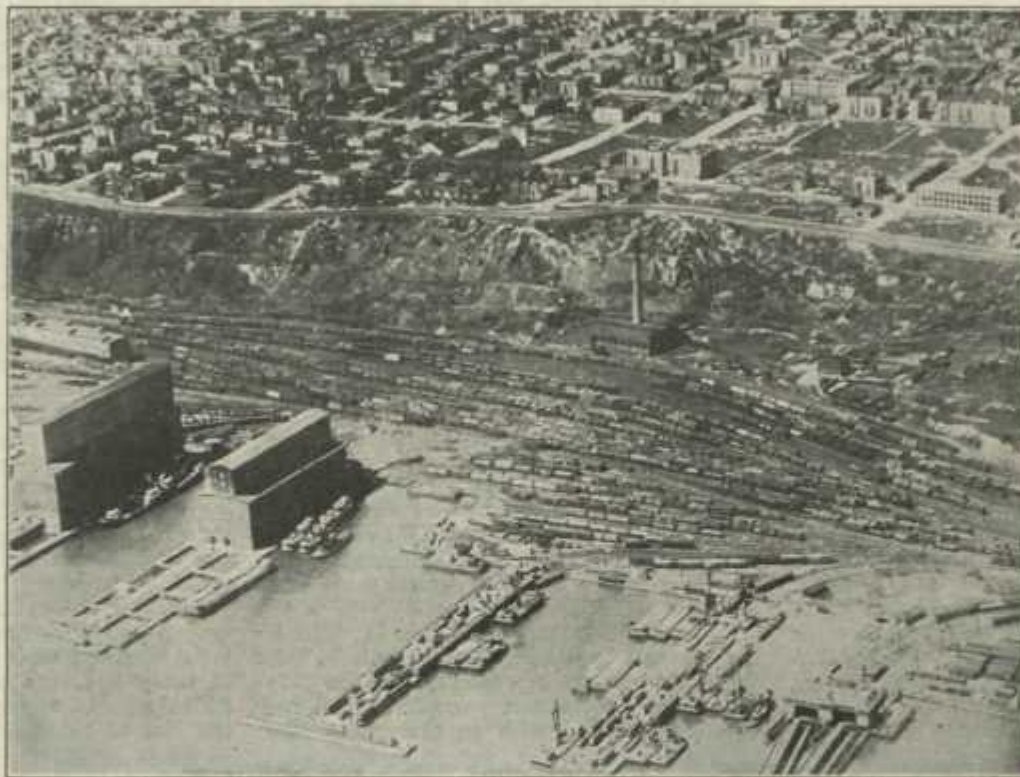
Among other new power it bought five decapod engines, the largest in the United States except those of the Pennsylvania. These engines, distributing their weight over five pairs of drive wheels instead of the more usual four pairs, give good tractive power with comparatively light loads on each axle—a fact of importance to a road such as the G., M. & N.

#### Double Box Car Output

AS A RESULT of all these improvements the average train began to take on weight and in 1923 exceeded a thousand tons. The transportation output of the average box car went up to 531 ton miles per day, nearly twice what it had been two years before. The number of cars in the average train went up from around 20 to more than 26.

On the financial side, these improvements were reflected in an operating income of \$955,000 in 1923, as compared with deficits before the Jackson extension was built and the line opened up for through traffic. After paying fixed charges there was something left to further improve the property.

Both the Tennessee Central and the G., M. & N. are continuing the policy of putting



By using box cars of greater carrying capacity but only seven feet longer than the smaller cars of other days, the railroads have solved the problem of yardage, always a difficult problem especially in such a congested territory as Manhattan Island, for example, where only one road, the New York Central, is fortunate enough to have freight tracks.

as much as one dollar and twenty cents.

The same men who had operated the property under the receivership operated it for the new company—with this difference. Money was borrowed, a dozen first-class new freight engines and a lot of new cars were bought, worn-out rail was replaced with heavier steel, long and high wooden trestles were filled with earth and many other money-saving improvements were made.

Filling the trestles, for instance, did away with the constant drain of patching them which the old company had never been able to get away from because it hadn't the money to do more than patch. Improving the track made it possible to operate the new engines and the new engines themselves made it possible to get enough tonnage into a train to pay the expense of running it and leave a little over.

In the first year of the new operation the cost of taking in a dollar was reduced from more than a dollar to 90 cents and in the second year, 1923, it was brought below 80 cents. Back of these figures lay the fact that trains were heavier, that they were being handled a mile an hour faster on the average, and that the average freight car was turning out 414 ton miles of useful transportation work each day instead of 251, as it had been in 1921.

The number of ton miles of transportation



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# Ferguson

## GUARANTEED BUILDINGS



earnings back into the property to make further improvements—the same policy that is followed by practically every other railroad in the United States that has any earnings to put back. There is no railroad in the United States finished, nor will there ever be so long as the country continues to grow and to call on the railroads to handle more and more goods. More goods means more and better facilities and that, in turn, means more money.

So long as there is a reasonable prospect of making anything on the money that is put into railroads money will continue to be invested. There are roads, though, where no one has been found willing to take the chances to rehabilitate them. Most of them have been so-called "short lines," although some, such as the Colorado Midland, have been roads of considerable importance in the country.

Perhaps as instructive an example as may be found of what happens when new capital cannot be brought into a railroad is the case of the Chicago, Peoria & St. Louis, operating 250 miles in Central Illinois, serving thirty-five towns, twenty of which are not reached by any other road, and serving exclusively forty-nine grain elevators, six coal mines and twenty-one other industries. The C., P. & St. L. has been suffering from slow starvation, although rate increases in 1923 did enable them to take in a dollar for 97.6 cents instead of the 102 cents it cost them in 1922.

The effect of starvation on a railroad is almost as obvious as the effect on a man. The cars of the C., P. & St. L. were able to deliver 177 ton miles of transportation a day in 1922. By 1923 they could produce only ninety-six. Average train speeds and train loading went down, and the hourly out-

put of the average freight train fell from 3,797 ton miles to 3,003. At the same time the greater efforts required for the starving railroad to do its work increased the coal consumption from 266 to 315 pounds per thousand ton miles. The road has given up the struggle and applied to public authority for permission to quit.

The cases of these comparatively small roads, of vital importance to the people they serve but of no great consequence in the general business life of the country, are interesting because they show so sharply and definitely what adequate capital enables a railroad to do toward increasing efficiency, reducing expenses and lowering rates, and, contrariwise, what a policy of slow starvation for railroads means in the way of decreased efficiency, increased expenses and higher tariffs for passengers and shippers alike.

## Peace Abroad; Economy at Home

*A Summary of the Midyear Conference of the National Chamber's Eastern Division*

**F**URTHER steps to aid in economic restoration abroad and to place upon a more stable basis economic conditions at home were projected at the Second Midyear Meeting of the Eastern Division of the Chamber of Commerce of the United States at Washington, October 23 and 24. Taken together, the subjects considered might be regarded at long range as constituting a final phase of reconstruction—the resumption of industry and the determination of public policies directly affecting it—and marking the crossing of the threshold of a new industrial and commercial era looking to the future rather than to clearing away the debris of the past.

The meeting was notable not only by reason of the fact that it was addressed by the President of the United States, who expounded the policies of the administration with reference to economic questions, but also because it signalized the formal opening of the new building of the National Chamber, an impressive structure on Lafayette Square overlooking the White House, which is to serve as the national gathering place for its organization members.

### Government Cost Oppressive

**T**HE MEETING of the American Section of the International Chamber of Commerce was held in connection with the Eastern Division meeting and brought into common focus both national and international problems which lie in the way of the general revival of trade.

The necessity for strict economy in government and in industry was the dominant note sounded in the discussion of these questions by the Eastern Division. Probably the most striking conclusion reached was that the time has come when a serious effort must be made to cut down the expenditures for state and local government which have resulted in a burden of taxation so heavy that it is becoming increasingly difficult to maintain the American standard of living.

"The operating expenses of business," the Division found, "have had to be reduced. Hard experience has left no alternative. The operating expenses of government have as a whole taken an opposite course. The reduction of expenses by one governmental authority causes little change in the burden when expenditures by other authorities rise.

"The Chamber has in the past made important contributions in the field of federal

taxation and this meeting wishes to place before the Board of Directors its belief that the Chamber can now make equal contribution in the field of state and local taxation by making thorough studies and placing the results before its members. There is immediate need that the aggregate expense of government, felt by the country in taxation, be reduced."

A similar recommendation, applicable to industry, was made in a declaration that waste is a burden alike to business and to the public. Progress has been made in the elimination of waste by standardization and the elimination of unnecessary varieties in products. The Division recommended that the Chamber carries these activities into every branch of business.

A third declaration by the Eastern Division meeting was the reaffirmation of the Chamber's position with reference to government ownership and operation. Attention was directed to this question by Frederick H. Ecker, President of the New York State Chamber of Commerce, who delivered an address, in the course of which he reviewed the experience of other countries in the government operation of transportation facilities. Summarizing his conclusion Mr. Ecker said:

The initial cost of the acquisition of the railways of the country, the inevitable increase in operating expenses, the loss of annual taxes now paid by the railroads to the Government, the fastening on the Government of the greatest army of small jobholders in the history of the world, all these factors admonish us that only the most convincing proof of compensatory advantage could justify the experiment.

And where lies the advantage? Could we expect better service? No one will seriously make such an assertion. Can we expect lower rates for shippers and passengers? The experience of all government projects proves the contrary. Can we expect a profit from the operation which will go to reduce the cost of government? Nothing in the history of the last ninety years warrants such expectation.

On the contrary, it is the confident judgment of responsible thinkers familiar with this problem that the only result of such a change in the United States, if it could be practically effected at all, would be, first, a perfectly stupendous national debt to be constantly augmented by billions of dollars annually for capital requirements for new equipment, additions and betterments and corresponding interest charge; second, poorer service for the same or higher transportation rates; third, a veritable army of public

employees always knocking at the door of the public treasury for greater compensation and collectively performing less service for the compensation actually paid; and, finally, among other things, a certain deficit, the amount of which no one would dare predict, but the source of the payment of which any child could predict, the pocket of every citizen.

Much of the time of the Eastern Division meeting was devoted to a close scrutiny of the activities of the various departments of the National Chamber through questions submitted to departmental managers. It expressed satisfaction with the nature and scope of the work in hand and in prospect at the Chamber headquarters.

Business problems were considered in broader aspect both by Julius H. Barnes, former President of the National Chamber, and Richard F. Grant, President, who addressed the meeting at the same session at which President Coolidge delivered the principal address. Lewis E. Pierson, Vice President, Eastern Division, presided.

### Dawes Plan Success Assured

**T**HE INTEREST of American business in the rehabilitation of Europe was emphasized at the meeting of the American Section of the International Chamber. An optimistic view of the European situation was presented in a cablegram from Owen D. Young, which was read by A. C. Bedford, Chairman of the American Committee, in which he said:

The ease with which the machinery under the Dawes Plan has been installed and the smoothness of its operation during the past six weeks is the best testimony of the existence of a new spirit determined to restore tranquillity in Western Europe. In advance of any assurances of a loan, Germany has paid in the last six weeks more than \$30,000,000, most of which in one way or another has been distributed to the creditor countries.

Now that the loan is completed and the proceeds put under the control of the Agent General practically all of the funds are in hand for the first year's operation of the Dawes Plan. At the same time, the Reichsbank will have in hand sufficient gold to cover a circulation on a 40 per cent basis as large at least as the circulation of Germany before the war. The creditor countries will receive either through delivery in kind or by direct payment substantially \$250,000,000 during the coming year. The German producers will receive payment for the goods supplied at regular market prices and France and Italy and other countries dependent upon





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In addition, the German railroads have been turned over to a private company with a foreign commissioner in control and there have been delivered for the account of the creditor countries more than two and a half billion dollars of first mortgage railway bonds which will bear 5 per cent interest and a sinking fund sufficient to amortize the principal in less than forty years. There have also been delivered \$1,250,000,000 of industrial debentures which are a first general charge on German industry and \$125,000,000 of those debentures are the obligations of individual German concerns of high standing.

A substantial part of these individual industrial bonds will, in my judgment, be redeemed during the next few years.

The above are in addition to the payments to be made under the plan from the German budget.

The Agent General has received not only the full cooperation of the German Minister of Finance as President of the Reichsbank, but he has also received the cooperation of the French and Belgians in the occupied territories and of English and Italians in all matters affecting them. If this spirit can be maintained the Dawes Plan will work. It will work irrespective of whether it is as good as its most ardent supporters believe or as bad as its worst enemies charge. With this spirit of cooperation the worst plan will succeed, without it the best plan will fail.

Nothing could be more helpful to the restoration of confidence and hope to the discouraged people of Europe than the magnificent expression of confidence by the American people as shown in their oversubscription of the German loan.

Successful as the Dawes Plan has been up to the present time, it was clearly the view of American business, as represented by the American Section of the International Chamber, that it only prepares the way for the commercial and industrial rehabilitation of Europe. It has set the stage for an economic revival but it remains for the business interests of the world again to set in motion the mechanics of production and distribution upon which world prosperity depends.

### Test for Our Economic Structure

"THE WORK," said Willis H. Booth, President of the International Chamber, at the meeting, "has only just begun. The great work which American business men have done and will continue to do in Europe will challenge the courage and capacity of our people, but it will at the same time impose upon us continually increasing responsibilities. In using the word 'business,' I employ it in its broadest sense as descriptive of our whole economic structure of capital, labor and executive capacity, and not in the restricted sense in which it is generally used.

"In cooperation with the business interests of all other nations we have now to set ourselves to even greater problems in connection with European rehabilitation than have been undertaken up to this time. We cannot utter one syllable that will minimize the importance of the great foundation which has been laid by the experts' committee. But, at the same

time, in looking into the future we can see a great task cut out for us. It is well to remember that in the resolutions organizing the experts' committees such committees were specifically prohibited from discussing matters of a contentious character. This was extremely wise but it did not eliminate these matters, nor can we solve them by merely ignoring them, nor is there any desire to ignore them after the proper foundation for their consideration has been established, as it has been established.

"We must now go on, if the economic and political structure is to be rehabilitated, to a discussion, understandingly we hope, of at least three major problems which are involved in the ultimate solution. First of these is the determination of the aggregate amount of German payments for reparations. The second is a consideration of the debts from one European country to another in their relation to such reparations payments. The debt of these countries to America is not contemplated in this discussion but obviously it will have to enter into it at some later date when a proper foundation has been made. The third, and still greater problem, is that which will develop with effort to transfer the obligations of debtor German existing in gold marks to the benefit or credit of creditor nations under reparations in the currency of the creditor nation or in the currency of any nation to which the creditor nation may desire to make payment."

# The Map of the Nation's Business

By FRANK GREENE

Managing Editor, "Bradstreet's"

OCTOBER—and November previous to the election—was a period of cross currents in business for which generalization is difficult, because while unseasonably warm weather, "hand to mouth" buying and election uncertainties held back distributive trade, restricted speculation and caused some lines of industry to lag, other apparently deeper currents ran quite strongly toward improvement and many measures of movement showed definite progress toward better things.

Perhaps the word repressive rather than depressive would best serve to describe the influences which induced the rather hesitating progress made in many lines. With election uncertainty removed, a flood of optimistic sentiment sought expression in buoyant markets for securities, in the confirmation of many contingent orders, especially for steel, and in the growth of a feeling, that given seasonable weather henceforth, a good though not a booming trade was to be expected.

### Trade Ship Needs Careful Pilot

BACK in the heads of the business community generally, however, seems to lie the feeling that, while 1924 will be a better year than seemed possible a few short months ago, American trade and industry are capable of taking care of more business than is likely to be offered and that high costs of all manufacture and distribution are apt to necessitate the trade ship being carefully navigated if shoals not perhaps clearly visible are to be avoided.

The trade map really shows few important changes from that published a month ago. This is due partly to leisurely retail buying reported during October, partly to changes in trade currents which seem to have directed much business from old time channels into others less well known, and also partly to the advance of the season, causing conditions current in that month to be compared with

progressively different conditions a year ago.

If, instead of a mere month's comparison, statistical or otherwise, a longer range, say three to five months comparison is had, a really better idea will be formed of the extent to which things have progressed from the rather low ebb point touched in trade and in many industries last summer.

Even compared with a month ago, however, there is rather more of fair trade and less of slow trade indicated, especially in the northwest where some of the unquestionably better basic conditions have begun to be reflected in current trade.

Crop damage is the cause assigned for the darkening of eastern Texas. Steel price basing changes, slackness in coal mining and warm weather are credited with the relative slowness of trade in or near some large iron and steel centers. In parts of New England, warm weather and relatively poor yields or low prices for some crops have affected some other areas, and the lagging of industry in various lines is chargeable with the dark shading in other sections. Taken as a whole, however, as already indicated, the map shows trade to have been of a fair tinge.

Some of the leading features of October were another slight rise in general commodity price levels—the fourth consecutive rise by the way—from the low of July, the aggregate of these gains being 9 per cent; a decline in failures from the like month of the past three years, and a surge forward in bank clearings to a point not touched since April, 1920, when deflation was beginning.

Pig iron production rose one-fifth above September and was 40 per cent above the July low point though still one-fifth below the large output of October last year. Steel

ingot output was 10 per cent better than in September and 66 per cent better than in July, although 13 per cent below a year ago in October.

As regards distributive trade proper, it is to be noted that while relatively slow trade at retail was indicated for the month as a whole, mail order sales in October were 30 per cent ahead of September and 8.7 per cent larger than in October, 1923. Chain store sales gained 21 per cent over September and were 11 per cent better than in October, 1923. Combined mail order and chain store sales were 26 per cent ahead of September and 10 per cent ahead of October a year ago, and for ten months on an aggregate of sales of \$615,000,000, these two classes of merchandisers gained nearly 10 per cent over last year.

These gains when set over against the reports of rather lagging retail trade generally would seem to point anew to the oft-mooted question as to whether, here as elsewhere, a change of trade channels is not indicated.

### Cotton Crop Close to Year's Peak

WITH the waning of the year and the seasonal quieting down of outdoor activities it is not surprising to learn that new building expenditures as indicated by permits are below those of earlier months and that lumber production has also sagged somewhat. For ten months, however, lumber production and shipments are less than 4.5 per cent below a year ago while orders are only 2 per cent off.

Estimated automobile output for October was 1.2 per cent below September but 16 per cent over June, and for ten months it is only 8.3 per cent below last year while 46.8 per cent ahead of 1922.

Warm, dry weather, while restrictive of fall trade and hurtful as rendering the country's woodlands liable to great damage from fire, was beneficial to cotton, official estimates





# The Putt Wins



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 ing Co.  
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 Indian Motorcycle Co.  
 Kellogg Company  
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 MacWhyte Company  
 Mallory Hat Co., The  
 Marion Steam Shovel Co.  
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 Co., The  
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 Quick-Meal Stove Co.  
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 Ward Baking Co.  
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In Business, as in Golf, the great  
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 —but it's the finishing stroke, the  
 close work, that tests morale  
 —and wins the match.

Executive Plans cover the entire  
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 actively along definite lines  
 —but the actual *execution* of the  
*last move* in Business is not in the  
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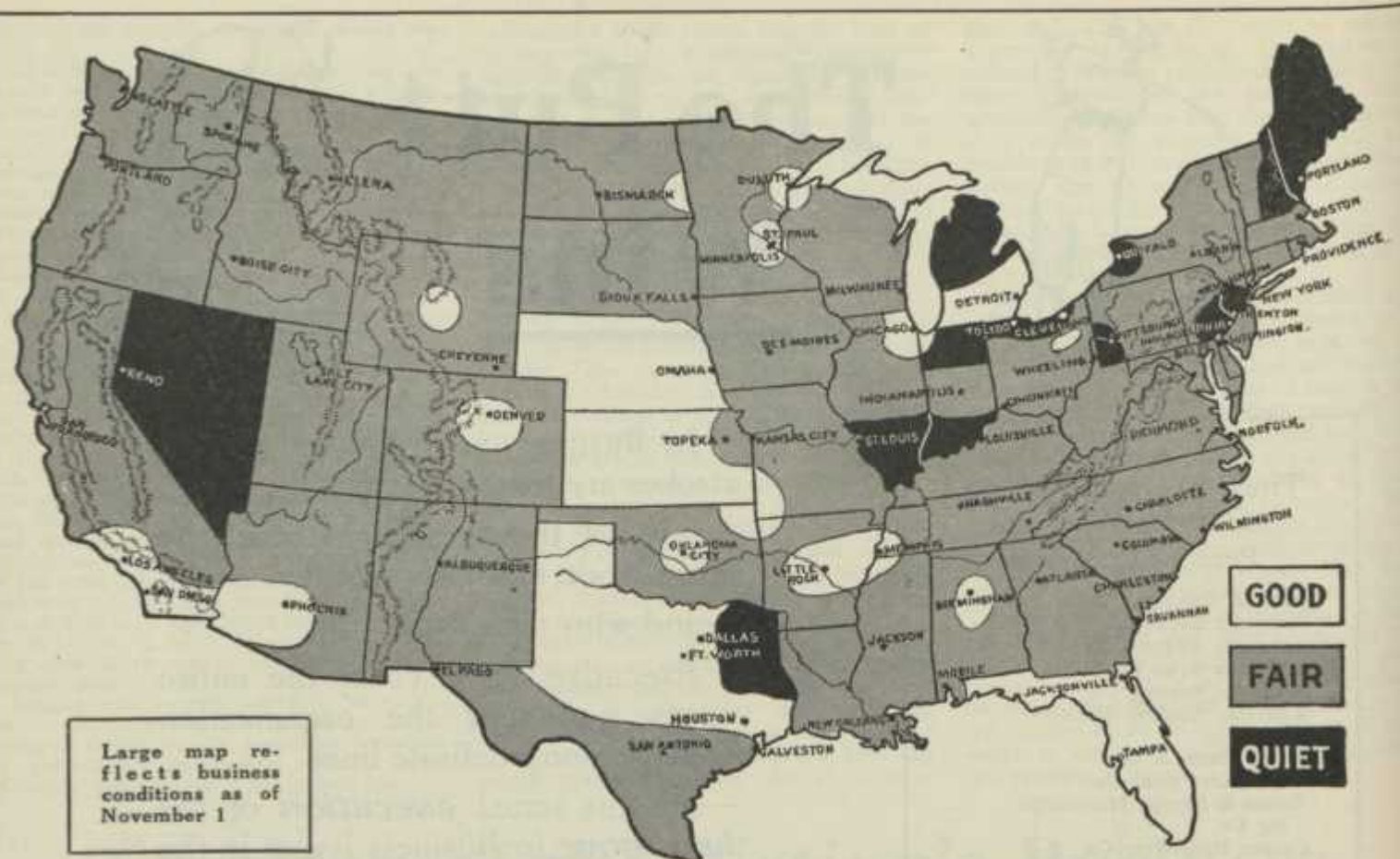
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The Business Map of Last Month



The Map of a Year Ago



of which are now 12,816,000 bales, or close to the peak of the year and 26 per cent larger than a year ago while New York prices are 30 per cent below. Corn crop outturn is not as good as earlier indicated, much chaffy light grain being reported, and the percentage of merchantable corn is lower than in many years.

An increase of 10 per cent is indicated in winter wheat seeding over last year which would seem to point to our farmers again defying fate, because of fortuitous conditions abroad having made this year's crop a profitable one.

Some interesting price changes are to be noted in the past month. Wheat after marked fluctuations and what is probably the largest single month's export on record was well up to the top at the beginning of November. Hogs, opening October at the highest price in two years, lost nearly a fifth of this on large receipts whereas best beef cattle sold late in the season at the best prices of the year.

A record world's crop of sugar has lowered prices for that staple, but Brazil's control of

its coffee crop production and export has resulted in an 8 cent advance from June and in doubling of prices since November 1 a year ago.

Hides and leather have gained strength with the liquidation of burdensome stocks by exports and otherwise. New England cotton mills very generally have resumed operations, as have those of the south, but some recent cuts in gingham, prints and percales are said to have been forced by southern competition somewhat aided by the fact that raw cotton prices are only about one and one-half cents above the year's low point.

#### October Sets Car Loading Record

WOOL prices have held all their previous advances; some sales in South Texas recently were reported only 9 cents below the peak of 1920, and woolen goods prices have been advanced in rapid succession several times this fall.

Pig iron prices are at about the lowest of the year, but scrap iron, a noted barometer, is firmer of late. Soft coal prices are low

and competition between rich and poor coal seams or between union and non-union mines is extremely sharp. Rubber is at the highest price of the year, an outgrowth of production regulation perhaps as much as reported current activity in tire making.

If railroad car loadings were to be estimated the best barometer of business volume, trade was about at its best in the month of October when two new consecutive high peak totals were set up and the approximate month's loadings exceeded October a year ago, when the 1923 peak was reached, by 1.5 per cent. Grain and general freight loadings broke all records.

While September gross railway receipts were nearly one per cent below a year ago, net operating income gained 26 per cent over the same month the year before and was the best since July, 1918.

Expansion in the country's export trade in September to the highest point since January, 1921, was due to larger exports of grain, especially wheat, and of cotton. October exports promise to exceed those of September very heavily.



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You can tell by looking at some stockrooms that they "just grew"—sections that do not match, a varied assortment of storage equipment that discourages the working of any system, that makes inventory a bugbear.

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Lyon Steel Shelving meets both of these major requirements of proper plan and equipment; the first through our Special Engineering Service, the second through complete standardization that makes for ease of erection, ready interchangeability of parts, simplicity in expansion, flexibility in application. And it's the strongest standard shelving made.

Many manufacturers started with only a section or two of Lyon Steel Shelving, plus a Lyon Plan. You can do the same, and settle your storage problem for all time to the permanent satisfaction of all concerned.



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# Things to Tell Your Men

By GEORGE E. ROBERTS

*Vice-President, National City Bank*

## IX—Speculation Is a Needful Service

YOU GO into a store to buy an overcoat. Is the dealer who sells it to you a speculator? He certainly is—one of the most common in the business world. He speculates on the number of overcoats which the men in his locality will buy; he speculates on the styles and colors which they will prefer; and he speculates heavily on the weather. If winter is late, as it often is, and the weather continues moderate and backward, people will not buy overcoats during the regular buying season. Dealers who have big stocks in their stores will be "stuck." Their calculations will have gone against them, and they must stand losses.

If, however, winter comes on promptly, you and everybody else will turn to the dealer for heavier clothing, as regularly. Assume, then, that in a desire to play safe he has only stocked a few overcoats, in a narrow range of styles, prices, and patterns. If you can't find what pleases you, you won't have a high opinion of that dealer. You will take your trade elsewhere, thus penalizing him for his judgment.

### All Must Assume Some Hazards

THE clothing dealer is in the position of most other men in business, in practically every line. They must make some speculations in order to be in business at all. The public is the first to blame them if, through conservatism, they will not assume the ordinary hazards that go with their particular field. The hazards are unavoidable if the business man expects to receive public support.

You buy furniture. Somebody months ago took chances on the fact that you would buy the particular kind of table or dining-room suite that you finally pick out. This was not merely the dealer from whom you made your purchase. A wholesaler somewhere took this chance before the furniture ever reached the dealer. Back of the wholesaler, somewhere, a manufacturer took similar chances, and along with him other manufacturers of stains, varnishes, metal fittings, and the like. Back of all these are the producers of lumber and other raw materials, who took similar chances.

Throughout business, dealers buy from wholesalers what they think the people will want; wholesalers order from manufacturers what they think the dealers will want; manufacturers order from other manufacturers, and from the producers of raw materials, what they think their customers will want. No one can be sure that the final product will be taken when it is ready for delivery. Styles may change; weather may change; customs may change; funds of purchasers may fail, due to crop losses and other reasons; there are scores of conditions that may upset the calculations all down the line. All these the dealers, wholesalers, and manufacturers must take into consideration, for whatever losses result will be theirs.

In agriculture, risk is inescapable. Nobody can tell in advance what the price of farm products will be because nobody can tell what the yield will be. A bumper corn crop may be cut down almost at harvest time by a premature frost. Wheat may suffer from dampness while waiting for the threshing machine. There is no way to compel hens to post in advance a schedule of how many eggs they are going to lay. Yet people demand bread, corn, and eggs day in

and day out. Whoever deals with these commodities is dealing with a speculative situation. He cannot avoid it.

Such a situation affects the workers. It determines the amount and regularity of employment. It also governs the prices of foodstuffs and other commodities.

Ordinarily people do not term the stocking of overcoats or straw hats by a clothing dealer "speculation." They do not call a farmer a "speculator" when he figures that the price of corn will rise by spring, and so stores his in his cribs for spring delivery. The term "speculation" has come to be applied to those who deal in wheat, corn, cotton, sugar and similar commodities, and who buy and sell securities. And the word has also come to carry with it a suggestion of something harmful—a suggestion that speculators are enemies to producers and consumers alike.

Claims are frequent, for example, that "speculators" buy up the farmers' crops when they are cheap and then hold them until prices rise, after which the crops are released as needed to serve the "speculators' immoral wishes. Actions of speculators are said to be back of food prices when they are either abnormally high or abnormally low. If prices are low, the "speculator" is defrauding the producer; if prices are high, he is working out the same evil purposes against the consumer.

Is there any justification for such sweeping claims? Are the actions of the speculator harmful? Could he be dispensed with, to the benefit of other classes of the people?

The places where most speculators meet, or where their actions concentrate, are in the organized exchanges—the boards of trade, the grain exchanges, the produce exchanges, the stock exchanges, and the like. We can arrive at a better understanding of the speculator, therefore, by considering his relation to the organized exchanges.

### Future Buying Safeguards Price

AN ORGANIZED exchange is not a company or a building but a market. It does no buying or selling itself, but furnishes a place where trading may go on and sets up rules and regulations to govern it. It also furnishes market information and reports. There are two main classes of sales that take place—one for cash, with the goods delivered when the sale is made, and the other called "futures." In future trading, what is bought or sold is a contract that calls for the delivery of a certain quantity or grade of commodity at a designated future date. Future trading is important, for by means of it those who so desire may avoid the hazards of speculation.

Let us assume, for example, that in July a miller wants to sign a contract to deliver several carloads of flour in December. He does not have the wheat in his bins, nor does he have bins enough to store wheat now for grinding six months hence. However, if he waits until November, say, to buy the wheat, its price may have changed; how shall he know now what price to ask for his flour?

On the Chicago Board of Trade wheat is

quoted for immediate delivery and for delivery at certain future periods. He bases the price to be asked for his flour on the quotation for wheat to be delivered in December. Then he contracts through the Board of Trade for sufficient December wheat to meet

his requirements. He buys, in other words, a "December future," or an option or contract entitling him to a certain quantity of wheat at a specified price, to be delivered in December in Chicago.

Now the miller may not be located in Chicago, but in Indianapolis or Minneapolis. He may have no intention ever of taking delivery of the actual wheat in December. By his future contract, however, he is protected in the price made on his flour. At a later time he may buy wheat in Minneapolis or Indianapolis actually to fulfill his December flour contract. As he does so he will sell his December future. He will sell on the Chicago Board of Trade in November, say, the same option which he bought there the July before.

### The Professional Speculator

MEANWHILE LET us suppose that the price of wheat has risen. This means now that in November the miller will have to pay more for actual wheat than he calculated in July. With the rise in the price of wheat, however, his December option also will have risen proportionately in price. When he sells the option, therefore, the profit which he will receive on it will offset the increased price he must pay for actual wheat. If the price of wheat falls instead of rises, he is reimbursed for the drop in value of his December option by a proportionately larger profit on his flour than was contemplated in his July figures. The net result of the whole plan is that, no matter how wheat prices may fluctuate, a miller is able safely to contract for future delivery of flour, basing his calculations on present wheat prices. The same is true of manufacturers of cotton, or of other commodities traded in on the organized exchanges. Those who desire to avoid the risks of price fluctuations have a means of doing so.

The particular form of future trading referred to above is called "hedging," because it affords a means whereby those who desire to avoid the risks of trading may do so. It is an especially useful safeguard for manufacturers and others whose business cannot be safely managed on a speculative basis. They desire stabilized conditions, permitting them to look to manufacturing for their profits. They wish to be able to contract ahead without fear of losses due to price changes. By means of the "hedge" they shift the risk of price changes to professional speculators, who are specialists in assuming such risks.

And who are these speculators? They are keen, capable men—dealers, brokers, traders and others in large numbers—who are provided with every means for informing themselves on the probable supply and demand for a commodity all over the world. By anticipating a change in conditions, by foreseeing a rise or a decline in price, these speculators seek to make a profit. They also perform useful services to the business world and to society.

It is particularly important, for example, that the price of a commodity at all times be an accurate reflection of the actual conditions governing the demand for it, and the



## 50,000 miles without one dollar expended for replacement parts



**T**HE Farnum State Lines, Inc., of Worcester, Mass., operate twelve Pierce-Arrow six-cylinder coaches. At the end of four and one-half months' service, the first coach had traveled more than 50,000 miles. It was not necessary to spend one dollar for replacement parts. The only service attention required was the normal necessity for cleaning out carbon and grinding valves. Since this report, the coaches have traveled an additional 25,000 miles.

The daily mileage of each coach is at least 280 miles—some are traveling more than 300 miles. The coaches are operated over several routes radiating from Springfield, Mass., Worcester, Mass., and Providence, R. I. Each of the coaches is duplicating the performance record of the first one put into service.

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The modern, powerful, six-cylinder Pierce-Arrow motor coach has assumed leadership in its field through ability to meet completely the public demands for comfort, speed and safety. Patrons show a marked preference for the Pierce-Arrow coach because it is actually more comfortable than a fine limousine—because it can be operated at speeds from 40 to 50 miles per hour with safety—because there is no noticeable vibration. The fact that it operates with the ease and flexibility of a high-powered touring car is an important safety factor in eliminating driver fatigue.

Low operating and maintenance costs have proved conclusively that it costs no more to operate the modern, luxurious Pierce-Arrow coach than the makeshift, converted-truck type of bus.

Are you aware of the profit opportunities in bus transportation?

Let us arrange a demonstration at our nearest distributing point. Meanwhile, write for complete information.

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Buffalo, N. Y.

### Standard Chassis

## \$4600

for 196-inch wheelbase, \$4750 for 220-inch wheelbase, at Buffalo; including starter, battery, generator, solid tires and electric lights. Pneumatic tires and disc wheels optional at extra cost.

Either chassis will accommodate the Sedan, eight-seater, or pay-enter types of wood or steel bodies, ranging from 18-passenger capacity upward.

Terms if desired

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### The Pierce-Arrow 6-cylinder Bus Engine

The silent, dual-valve, dual-ignition Pierce-Arrow bus engine develops over 100 horsepower at 2500 revolutions per minute. It is so flexible that gear shifting is reduced to a minimum.

The bus is propelled by a trouble-free inverted worm gear drive. The low-hung chassis has an unusually short turning radius.

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**SIX-CYLINDER MOTOR BUSES**



supply. Price is an indicator which society follows. If a shortage of sugar is in sight, for example, we rely upon a rise in price to call attention to this condition. The increase in price encourages other producers to enter the field. It also results in a curtailed use of sugar, so that the present supply can be made to serve until the new crop comes in.

In an organized market, where well-informed speculators are in close touch with every condition, price movements quickly reflect even the slightest change in fundamental conditions. So sensitive is the indicator, for example, that on the Chicago Board of Trade wheat fluctuates hourly as the various factors affecting demand and supply make themselves felt. In normal times the fluctuations may move for days within a range of one cent, showing how closely attuned the market is to all the factors governing it.

In markets not so well organized, fluctuations occur less often and are much wider in range. Butter, for example, often moves as much at a time as one cent per pound, while potatoes may remain at the same figure for days and then jump five cents a bushel.

The fact that prices so fluctuate on the organized exchanges is often pointed to as evidence that there is constant artificial manipulation, which is the farthest from the actual case. What frequent fluctuations indicate is a high state of competition, with every factor registering an influence. Evidence of this is found in an investigation of the fluctuations in wheat prices extending over 100 years, and covering a period both before and after grain exchanges were in existence. Before future trading was established the fluctuations were twice as great as in the period since. A comparison of the fluctuations in cash prices of wheat, barley, and oats for eighteen years shows the widest fluctuation in barley, which is not traded in for future delivery. Oats is very similar to barley both in production and use, yet oats, although traded in for future delivery, did not show so wide a variation. The price of barley fluctuated over 100 per cent in price eight times in the eighteen years, while wheat so fluctuated only once, and oats only twice.

It should be clearly noted that speculators profit only as they anticipate conditions. If they speculate for a rise in wheat and wheat does not rise, they fail to make a profit. If, on the other hand, they feel that conditions indicate a fall, they only profit by being correct in their analysis. Since this is the case, speculators who are well informed have a steadying effect upon prices; they stabilize prices, and reduce the severity of the fluctuations. They improve conditions by calling attention to an oversupply or to a shortage in advance of the time that it otherwise would be felt in sharp severity. They equalize consumption over the time which the available supply must serve.

### Russian Competition With Palestine

RUSSIA is setting up in competition with Palestine in providing for the Jews. The Ukraine is variously reported to have put aside 80,000 and 8,000,000 acres of farm lands into which 3,000 Jewish families will move next spring.

The movement is financed by a loan from the American Joint Committee of \$100,000 and similar Jewish agricultural colonies will be organized in nearby sections—the Crimea and Volga districts—so soon as funds are available. They are looking to America.

A majority of the Jewish people are said to favor the government's plan, but orthodox members are inclined to the Zionist project.

## From the Tax Publicity Tomb

THE STIR and strife regarding publicity of income taxes is no new thing in this country. Half a century ago we went through it all, for in the decade from 1862 to 1872, the United States had an income tax and in that period publicity was tried and abolished.

"The Government has passed its responsibility of administering its job on to the editors and reporters of the country," then thundered Godkin, of *The Nation*, while the Commissioner of Internal Revenue, in his report in 1863, the first year of the income tax, said:

In order that it might not be felt to be inquisitorial in its character, the instructions issued by this office required that the returns of income shall not be open to the inspection of others than officers of the revenue. Some doubt having been entertained whether a proper construction of the law sustains the instructions, I recommend that the doubt be removed by express legislation.

But his appeal was of no avail, and in 1866 the battle against publicity was thrown on the floor of Congress. James R. Garfield, of Ohio, later to be President and shot while in office, led the fight against publicity. Things he said then are as pertinent now. Here is one extract:

The gentleman from Iowa is mistaken when he says an honest man has no objection to the public understanding about his private affairs. Suppose a man has had serious losses during the year, so that his income would be smaller than people expect it to be. Now, he would not want to let that be known so as to alarm his creditors and bring them all down upon him when otherwise he would come out safely. There is no reason in the world, unless the public interests require, that the private affairs of individuals should be brought out and paraded in the public papers. I admit that some sort of publicity is necessary to act as a pressure upon men to bring out their full incomes; but if the lists are left open for public inspection, it will be an ample pressure upon them.

### An Editorial of Protest

THE ARGUMENTS on the other side also sound familiar today:

Now, if the gentleman from Ohio (Mr. Garfield) wants to place a padlock on these records, I warrant you that every wealthy man in the House will vote with him on this subject. If the gentleman wants to put a padlock on the return which the wealthy man makes, so that the poor man shall not see it, though the burden will fall upon him if the rich man does not pay his full share, then let him say so.

But the amendment for privacy of income taxes was lost.

Four years later the matter was thrashed out again, and this time a death blow was landed to publicity.

It is worth reading again, this extract from *The Nation* for November 25, 1869. It might almost be reprinted as an editorial in November, 1924:

It is as much as any ordinary man can bear to submit any detailed account of his private affairs to an official of any kind, much less to an official of the kind one usually finds in the subordinate positions of the national service. So by way of making this inquisitorial feature of the tax not only more effective but less offensive and thus bringing recalcitrant and dishonest taxpayers up to the mark, the newspaper reporters were set to work.

The assessors' books were thrown open to them; and they were encouraged, if not invited, to lay every man's returns in black and white before his neighbors, so that he might be intimidated by the fear of their tongues or the desire of im-

posing upon them, to write his income as high as possible.

For individual feelings, for the "natural and inalienable right" of everybody to keep his affairs to himself, unless called upon to reveal them in a judicial controversy—a right, too, which a government should not only respect but encourage—there was no regard whatever; for the demoralizing effect on manners and morals of converting the whole community into a horde of spies or detectives, and of multiplying the gossips and busybodies, whose numbers and activity make them already one of the scourges of civilized society, there was no regard whatever.

There was at first some little murmuring and hesitation about the practice, both on the part of the press and the public; but the public was speedily reconciled to it by the papers at first judiciously confining their revelations to the large incomes. Men of large income are few; those who want to know how much they have are many; away, therefore, with their delicacy; let the people have a look at their checkbooks.

Last year, however, one paper reduced the system to perfection by publishing everybody's income return as it stood on the assessors' books. In other words, the work of verifying and rectifying the assessment was handed over bodily to the editor of the newspaper, who took his pay for the work in the increased sale thus effected for his valuable sheet, and encouraged the public to regard as a scoundrel any man whose income did not appear in the list, or did not accord with his neighbor's notion of what it ought to be.

### Only One Means of Redress

THE MISTAKES in the list were, of course, innumerable. And men's names and the figures of their returns were printed wrongly; and hundreds of men had, of course, special reasons to give for seeming discrepancies between their means as indicated by their style of living and as indicated by their sworn returns.

Those who felt themselves wronged had only one remedy; and that was a letter to the editor, to be also published in the valuable sheet, thus still further increasing its sale; and the poor taxpayers were cordially invited by the editorial Rhadamanthus to step up briskly to his bar and give an account of themselves.

In other words, the business of the United States assessors, in this district at least, the most important in the Union, was all but completely transferred to private individuals, who undertook for a few thousands dollars to blackguard the weak and timid into paying more than they ought to pay and to frighten the fraudulent into paying as much as they ought to pay.

The process was enough to bring tears into the eyes or blushes to the cheeks of anybody who had a correct idea of how the work of government ought to be done, for the purpose for which the Divinity endowed man with his reason and judgment, and who reflected that the country contains ample material for as scientific, able and honest administration as exists or could be devised anywhere.

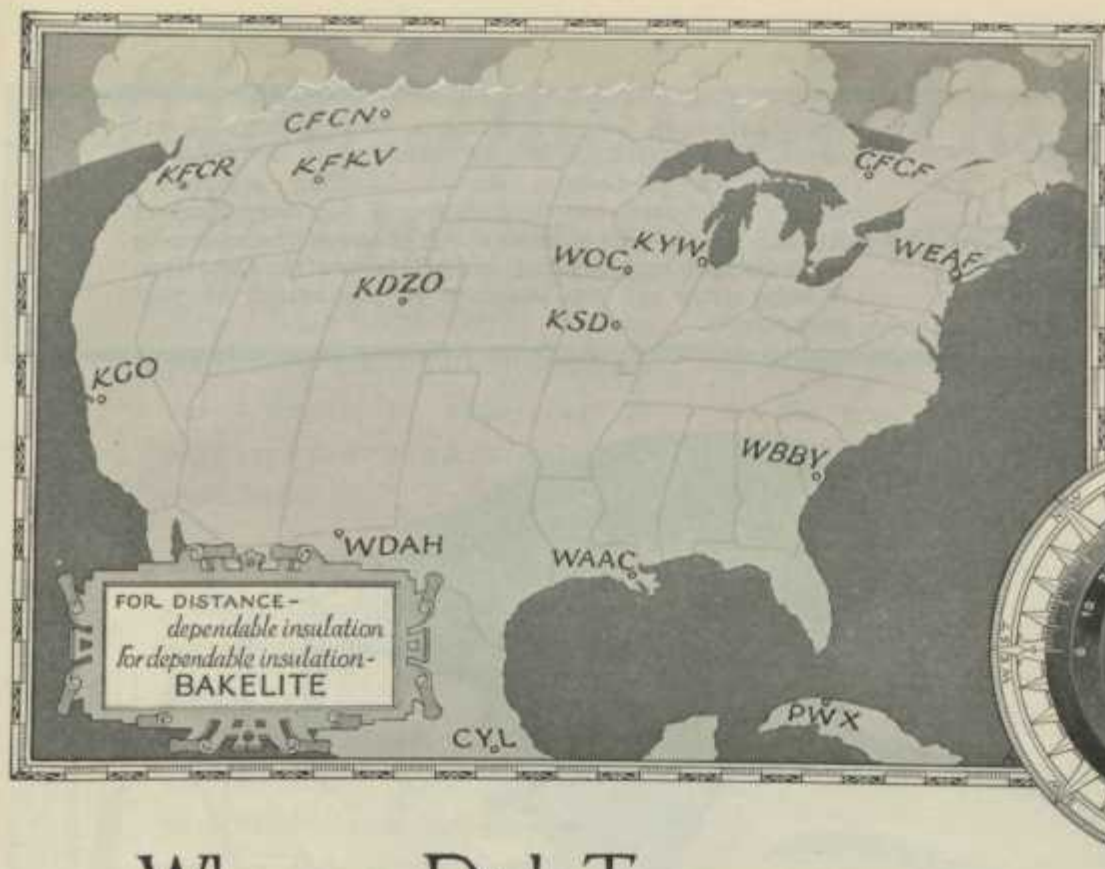
### Lessons Motor Industry Must Learn

A PROCESS of elimination is going on in the automobile manufacturing business. Since 1921, thirty-one car makers have made their exit, and more will go unless the following points are read, marked, learned and acted upon, according to Edward S. Jordan, president of the Jordan Motor Car Co.

There are three things, he claims, that must happen "before the majority of manufacturers in the industry can be considered fit." Here they are in summary:

1. Concentration by each manufacturer on the production of one model chassis.
2. Elimination of useless expense—such as high-salaried employees and costly bonuses.
3. Understanding of the principles of economical merchandising (as yet rare among business men).





## Wherever Dials Turn — Bakelite for dependable insulation



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Bakelite Tubing

**N**EW YORK, San Francisco, Montreal, and Havana—if you want distance you must have dependable insulation. Dependable insulation means Bakelite.

The U. S. Navy, the Signal Corps, and 95% of the leading radio manufacturers, with every facility for testing materials, have chosen Bakelite for panels, dials, sockets and many other parts. Improvements are constantly being made in radio equipment, but no insulation has been found superior to Bakelite.

Strong and stable, Bakelite will not split, warp, or sag, and it does not lose its beautiful finish, nor will it deteriorate with age. And most important of all, it retains its high insulating

properties under varying atmospheric conditions.

The name Bakelite is synonymous with quality. Long recognized as a standard material in the automotive and electrical industries, it is also the premier insulation for radio.

There is a place for this "Material of a Thousand Uses," not alone in radio but in almost every industry. Our Engineering Department is at your disposal.

"The Story of Bakelite," by John Kimberly Mumford, has just been published. This is a fascinating and educational story about the discovery and development of Bakelite. We shall be pleased to send you a copy.



Send for our illustrated booklet  
**BAKELITE CORPORATION**  
241 Park Avenue, New York, N. Y.  
Chicago Office: 636 West 21st Street



Headset—Molded of Bakelite



Tube Socket and Base—Molded of Bakelite



Before you choose, be sure that the set you buy has Bakelite insulation

# BAKELITE

THE MATERIAL OF A THOUSAND USES

When writing to BAKELITE CORPORATION please mention the Nation's Business

When you "build your own" set insist on a Bakelite panel and parts





The Division of Simplified Practice, Department of Commerce, Washington, is urging industry to simplify its methods of production. Material-handling equipment, when rightly used, has the sanction of Secretary Herbert Hoover, head of this movement. *It is one of the means by which industry may help itself and help labor at the same time.* It helps carry out the teachings of this branch of your government.



# JEFFREY

When writing to THE JEFFREY



# Lifting! Tugging! Hauling!

## *It's a Job for Jeffrey Machinery!*

Here's this fellow right out in your shop today, lifting around heavy objects by hand—*just as they used to do when the pyramids were built!*

Moving materials by hand is not economical. Yet, if you will walk out through your own plants and yards, you may be surprised by the number of men still employed at shoveling, wheeling, lifting parts and materials—doing what can be done more swiftly and cheaply by Jeffrey Material-Handling Equipment.

### Handle ALL Materials Mechanically

In spite of the great advances that have been made in mechanical handling, few plants have completely done away with hand methods.

Put your men at *productive* work, at better pay, and let machinery do the unproductive work. It's better for the men, better for industry and better for you.

### Why Not Now?

If materials are being handled uneconomically anywhere in the course of your production, competition will sometime force the correction of this waste. But why not find your own opportunities for saving? Why not get those richer profits that come with being the first to turn material-handling into a completely mechanical operation?

The main Jeffrey office or the nearest branch will take care of your inquiry, backed by the entire engineering and manufacturing resources of the company.

## The Jeffrey Manufacturing Company

*Mining and Material Handling Equipment*

Columbus, Ohio

New York  
Buffalo  
Rochester

Philadelphia  
Pittsburgh  
Scranton, Pa.

Boston  
Cincinnati  
Cleveland

Chicago  
Detroit  
Milwaukee  
Montreal

St. Louis  
Denver  
Los Angeles

Charleston, W. Va.  
Charlotte, N. C.  
Birmingham

# MATERIAL HANDLING EQUIPMENT

### Some Jeffrey Products

Elevators  
Conveyors  
Portable Loaders  
Coal and Ashes Handling Machinery  
Skip Hoists  
Chains and Attachments  
Sprocket Wheels, Gears  
Power Transmission Machinery  
Crushers  
Pulverizers  
Shredders  
Industrial and Mine Locomotives  
Tippie Equipment  
Mining Machinery  
Ventilation Fans



## Code of Ethics OK's Pass 500 Mark

WITH thirty-one states and three foreign countries reporting this month, the Principles of Business Conduct, adopted at the last meeting of the United States Chamber of Commerce, have now been accepted by more than 500 organizations, the latest additions to the honor roll being as follows:

### ALABAMA

Mobile Chamber of Commerce, Mobile.  
Tuscaloosa Chamber of Commerce, Tuscaloosa.

### ARIZONA

Bisbee Chamber of Commerce, Bisbee.

### CALIFORNIA

Hanford Chamber of Commerce, Hanford.  
Chamber of Commerce, Long Beach.  
Commercial Board of Los Angeles, Los Angeles.  
Ontario Chamber of Commerce, Ontario.  
Pomona Chamber of Commerce, Pomona.  
San Diego Chamber of Commerce, San Diego.

### COLORADO

Walsenburg Chamber of Commerce, Walsenburg.

### CONNECTICUT

Stamford Chamber of Commerce, Inc., Stamford.  
Waterbury Chamber of Commerce, Waterbury.

### DISTRICT OF COLUMBIA

National Coal Association, Washington.

### FLORIDA

Jacksonville Chamber of Commerce, Jacksonville.

### GEORGIA

Board of Commerce, Augusta.  
Chamber of Commerce, West Point.

### ILLINOIS

Illinois Grain Dealers Association, Champaign.  
Automotive Equipment Association, Chicago.  
Farm Mortgage Bankers Association of America, Chicago.  
Federation of Mutual Fire Insurance Companies, Chicago.  
Industrial Club of Chicago, Chicago.  
Investment Bankers Association of America, Chicago.  
National Association of Retail Druggists, Chicago.  
Plywood Manufacturers Association, Chicago.  
Wirebound Box Manufacturers Association, Chicago.  
Wire Cloth Manufacturers' Association, Chicago.  
Peoria Association of Commerce, Peoria.

### IOWA

National Selected Morticians, Des Moines.

### KANSAS

Chamber of Commerce, Arkansas City.  
Chanute Chamber of Commerce, Chanute.  
Coffeyville Chamber of Commerce, Coffeyville.  
Pittsburg Chamber of Commerce, Pittsburg.  
Chamber of Commerce, Winfield.

### LOUISIANA

New Orleans Board of Trade, Ltd., New Orleans.

### MAINE

Chamber of Commerce, Lewiston.  
Chamber of Commerce, Portland.  
Waterville Chamber of Commerce, Waterville.

### MARYLAND

Chamber of Commerce, Hagerstown.

### MASSACHUSETTS

Dorchester Board of Trade, Boston.  
Haverhill Chamber of Commerce, Haverhill.

### MICHIGAN

Adrian Chamber of Commerce, Adrian.

### MINNESOTA

Owatonna Chamber of Commerce, Owatonna.

### MISSOURI

Hannibal Chamber of Commerce, Hannibal.  
National Basket and Fruit Package Manufacturers' Association, St. Louis.  
St. Louis Chamber of Commerce, St. Louis.

### NEW JERSEY

Jersey City Chamber of Commerce, Jersey City.  
Morristown Chamber of Commerce, Morristown.  
Trenton Chamber of Commerce, Trenton.

### NEW YORK

Binghamton Chamber of Commerce, Binghamton.  
Ilion Chamber of Commerce, Inc., Ilion.  
American Exporters' and Importers' Association, New York.  
Association of Electricians International, New York.  
Barbers Supply Dealers Association of America, New York.  
Foundry Supply Manufacturers' Association, New York.  
Greeting Card Association, New York.  
Heating and Piping Contractors National Association, Inc., New York.

Italian Chamber of Commerce in New York, New York.  
Merchants' Association of New York, New York.  
Metal Finishers Equipment Association, New York.  
Motor and Accessory Manufacturers' Association, New York.  
National Association of Engine and Boat Manufacturers, Inc., New York.  
National Association of Office Appliance Manufacturers, New York.  
National Association Printing Ink Makers, New York.  
National Board of Steam Navigation, New York.  
National Wholesale Druggists' Association, New York.  
The Netherlands Chamber of Commerce in New York, Inc., New York.  
United States Trade Mark Association, New York.  
United Waist League of America, New York.  
Niagara Falls Chamber of Commerce, Niagara Falls.  
Chamber of Commerce, Olean.  
Poughkeepsie Chamber of Commerce, Poughkeepsie.

### NORTH CAROLINA

Asheville Chamber of Commerce, Asheville.  
Charlotte Chamber of Commerce, Charlotte.  
High Point Chamber of Commerce, High Point.

### OKLAHOMA

Jackson County Chamber of Commerce, Altus.  
Chamber of Commerce, Muskogee.

### OREGON

Eugene Chamber of Commerce, Eugene.

### PENNSYLVANIA

Lebanon Chamber of Commerce, Lebanon.  
American Industrial Lenders' Association, Harrisburg.  
Pennsylvania Lumbermen's Association, Philadelphia.  
Philadelphia Board of Trade, Philadelphia.  
Philadelphia Bourse, Philadelphia.  
Retail Lumber Dealers' Association of Pennsylvania, Pittsburgh.  
Tyrone Chamber of Commerce, Tyrone.  
Greater Wilkes-Barre Chamber of Commerce, Wilkes-Barre.  
Williamsport Chamber of Commerce, Williamsport.

### TENNESSEE

Southern Appalachian Coal Operators' Association, Knoxville.

### TEXAS

Galveston Chamber of Commerce, Galveston.  
Chamber of Commerce, San Antonio.

### UTAH

Chamber of Commerce, Logan.

### VIRGINIA

Harrisonburg Chamber of Commerce, Inc., Harrisonburg.  
Chamber of Commerce, Lynchburg.  
Southern Hardware Jobbers' Association, Richmond.

### WASHINGTON

Everett Chamber of Commerce, Everett.  
Olympia Chamber of Commerce, Olympia.

### WEST VIRGINIA

Fairmont Chamber of Commerce, Fairmont.  
Huntington Chamber of Commerce, Huntington.

### WYOMING

Chamber of Commerce, Casper.  
Cheyenne Chamber of Commerce, Cheyenne.

### FOREIGN

American Chamber of Commerce of Sao Paulo, Sao Paulo, Brazil.  
American Chamber of Commerce in Peking, China.  
American Chamber of Commerce in Portugal, Lisbon, Portugal.

## Saving by Giving Away

**FROZEN ASSETS** is the description a member of the Shipping Board has applied to our government-owned merchant ships. According to this member of the board, operation of the ships now in active service will cost the taxpayers of the country, in out-of-pocket expense, at least \$30,000,000 in the present year. He accordingly figures that the taxpayers would be better off by \$150,000,000 if the ships were given away to people who would undertake to operate them for five years.

## Pan-American Chamber Planned

**AT A RECENT** meeting in Atlanta, Ga., of commercial delegates of several of the Latin-American republics, the first steps were taken toward the establishment of a Pan-American Chamber of Commerce, with headquarters in New Orleans, for the furtherance of commercial relations between the Latin-American countries and the United States. New Orleans is favored as the site of the chamber because of its accessibility to Latin America.

## Do Chambers Take Too Many Jobs?

**LOCAL** community problems and the larger national and even international questions with which organized business has come to deal were placed in clear perspective through the Tenth Annual Meeting of Commercial Organization Secretaries, held in the new National Chamber building October 22.

Secretaries and executive officers of chambers of commerce and commercial organizations from thirty-six states and the Dominion of Canada attended the convention. Practical questions of administration and management absorbed major attention, but matters of policy had an important place in the discussion.

A noticeable trend of opinion was reflected in addresses by J. David Larson, the retiring President; S. Christy Meade, Secretary of the Merchants Association of New York, and others in the direction of restricting chambers of commerce activities. This was defined as service to commerce. In improving conditions under which trade and industry are carried on, as Mr. Meade suggested, chambers of commerce will be carried into many activities, but they should be subordinated to the central purpose of the organization.

The discussion covering a wide range of subjects—such as community financial campaigns, services to industries, the protection of retail trading—left the striking impression that there was no essential difference in the community interests of the large industrial city and the small town. The necessity of fitting the program of a chamber of commerce to the community was emphasized by J. H. Hudson, Secretary of the Association of Commerce of Bloomington, Ill., but in the consideration of general questions secretaries of all chambers—from Cairo, Ill., and Independence, Kans., to Chicago and Buffalo—found themselves on common ground.

Local commercial organization activities were more closely linked with the activities of the National Chamber through a meeting of the secretaries with the departmental managers of the latter organization. Attention was directed especially, by William Harper Dean, Chief of the Agricultural Bureau of the National Chamber, to methods by which organized business is cooperating with agriculture and to the advantages both had derived from joint enterprise of this character.

"Slowly but surely we are realizing that agriculture to achieve prosperity must sell its output on a cost-plus basis," said Mr. Dean. "There is too much senseless optimism stirred up every time a commodity experiences a rising market. Thirty-cent cotton, dollar-fifty wheat, eleven-cent hogs, mean prosperity only to those who have produced these things at a cost low enough to establish a margin. Unfortunately there is not enough known of production costs. Surveys to determine these figures are a comparatively recent innovation. Here the Chamber of Commerce has a definite duty to perform: encourage its Agricultural College to make such studies; insist upon it!"

In its closing session the National Association of Commercial Organization Secretaries elected the following officers and directors:

William C. Culkins, President, Cincinnati, Ohio; Raymond B. Gibbs, First Vice-President, Kansas City, Kans.; Roy S. Smith, Second Vice-President, Albany, N. Y.; A. V. Snell, Secretary, Treasurer, Jacksonville, Fla.; George Firmin, El Dorado, Ark.; J. H. Hudson, Bloomington, Ill.; Walter O. Lochner, Trenton, N. J.; C. W. Otto, Flint, Mich.; Roscoe Goddard, Worcester, Mass.



## News of Organized Business

A WEEK of jubilee celebration marked the formal opening in October of the new home of the Boston chamber. The program included representatives of other trade and commercial organizations. Among the speakers were Julius H. Barnes, former president of the Chamber of Commerce of the United States, and James M. Beck, solicitor general of the United States.

The building faces on Federal Street, between the South Station and the post office, in the heart of the business part of the city. The construction cost more than \$6,000,000. Fourteen floors are included in the building. The first to the twelfth, inclusive, are to be rented for business offices. The grill work and stone figures of the doorway symbolize New England as a commercial region. The ceiling of the lobby is embellished with figures in green and dull gold which present allegorical representations in harmony with the motif of the building.

On the thirteenth floor are the general offices of the Boston chamber, and also fifteen private dining rooms for the use of various committees of the chamber or other organizations. The dining rooms have capacities ranging from 10 to 250 persons.

The fourteenth floor includes a dining room, seating 1,300, for the use of members. The rooms for the members are either of Colonial design, or of the corresponding English period. Accessible from the dining room is the members' lounge, which overlooks Boston harbor. A feature of this floor is a \$15,000 pipe organ. There are also a library and reading room of early Colonial design, and facilities for moving pictures and broadcasting, telephone room and checking space.

In the basement is a cafeteria room of Pompeian design, with a capacity of 450 seats. Valet service is also provided in the basement. Other conveniences include shower baths, dressing rooms, and a barber shop.

The number of persons who will pass in and out of the building daily is estimated at 5,000, and ten self-levelling elevators have been installed to serve them. Among the tenants now renting offices in the building are: The National Association of Cotton Manufacturers, National Association of Woolen Manufacturers, Boston Typothetae Board of Trade, New England Hardware Dealers Association, and the Anthracite Bureau of Information. Nine railroad companies have established freight and passenger offices in the new building.

The Boston chamber includes 7,500 individual members in Greater Boston, and nearly 600 individual members outside of metropolitan Boston.

### Proportionate Representation Plan

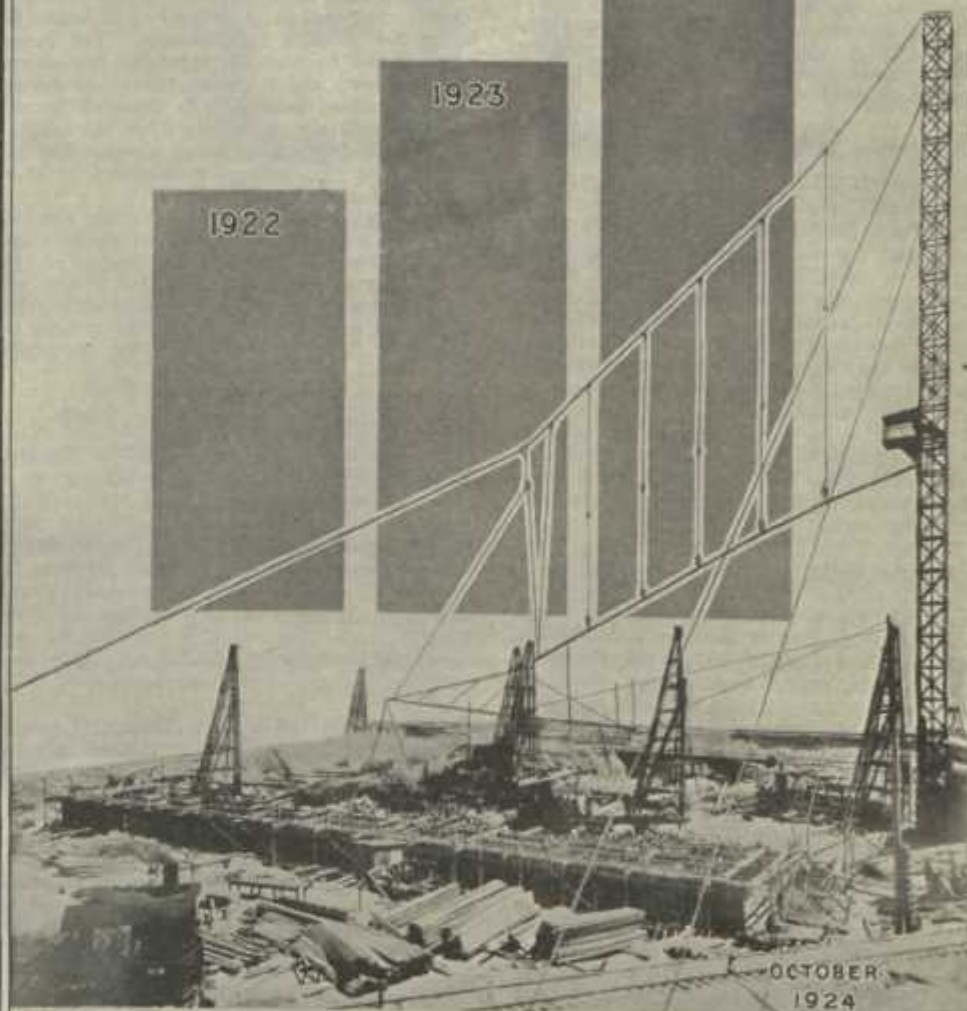
PROPORTIONATE representation of San Francisco's business interests in support of the chamber's activities in the service of the community is foreshadowed in a booklet on community intelligence, published by the San Francisco chamber. The booklet, says *San Francisco Business*, is the first step in a new plan of organization. The plan would:

Divide commercial San Francisco into forty-five groups that will give representation of the entire business life of the community. Each of these groups, if the chamber of commerce is to function efficiently, should support the chamber in exact proportion to its place in the community and should be represented accordingly.

But coming back to this program of community intelligence. Let us say that the present membership of the chamber of commerce is, roughly speaking, seven thousand. Classifying this membership into business or industrial groups and establishing for each a quota based upon the part that it bears to the community, it may be found that one group is already oversubscribed. Obviously, it must

## WORK IN PROGRESS

Relative volume of construction in progress at this date for three years. Besides a large volume of industrial and office building construction, present work includes power installations totaling over 500,000 horse power.



## STONE & WEBSTER

INCORPORATED

DESIGN · BUILD  
OPERATE  
FINANCE

NEW YORK, 120 Broadway  
SAN FRANCISCO, Market Bldg.

BOSTON,

147 Milk Street

CHICAGO, 18 S. Dearborn Street  
PHILADELPHIA, Rad. Estate Trust Bldg.



be reduced if the scheme is to be carried out, or other groups that are under-subscribed must be built up to their proper and just representation.

Right here is where the work of the membership department begins. And that work will not be complete until each of these forty-five groups is proportionately represented by membership in the chamber of commerce.

This is not a membership campaign of the chamber of commerce. It is not a drive merely to increase the present membership from seven thousand to ten or twelve or fourteen thousand. It is not an attempt to make the San Francisco chamber the largest in point of membership in the United States, but the greatest in point of service to its members and to the community.

... when all of the problems of all of the industries are brought to the chamber of commerce for intelligent cooperative solution—when all business pulls together for San Francisco and for the community, then will the job be finished—the program of community intelligence complete.

### Advertising Adviser for the Retailer

**T**HE PRINCIPLES of advertising applicable to a small retail business are described and made useful in "Small Store Advertising," a booklet published by the Domestic Distribution Department of the Chamber of Commerce of the United States. The booklet was prepared to help the retailer to increase his sales through effective publicity intelligently applied. Explanation is given for the use of newspapers, magazines, window displays, direct-by-mail advertising, circulars, letters, enclosures, and other advertising devices.

On application to the Domestic Distribution Department a copy of the booklet will be sent without charge. Additional copies are obtainable at 10 cents each.

### Exports Gain in First Six Months

**A**LTHOUGH most of the important groups of American exports made substantial gains during the first half of 1924 over the same period of 1923, grains, sugar, paper, chemicals, coal and cotton manufactures declined, according to an analysis of American foreign trade for the first six months of the year published by the Foreign Commerce Department of the Chamber of Commerce of the United States. The analysis shows that exports for the first six months of 1924 totaled \$2,089,000,000, an increase of \$144,000,000, or 7.4 per cent above the amount of the exports last year.

The department's statement points out that "during the second quarter of 1924 our exports fell \$113,000,000 below those of the first quarter—a decline of approximately 10 per cent—in keeping with the normal seasonal decline.

"More than 40 per cent of our export trade consisted of manufactured goods, of which we shipped 10 per cent more than last year. Exports of semi-manufactured goods and raw materials also made excellent increases in value."

### A Dictionary of Fur Names

**T**O ELIMINATE the confusion of trade names used in the manufacture and sale of furs throughout the country, the National Association of the Fur Industry is to issue a dictionary of fur names, with rules for advertising furs. The dictionary, prepared under the direction of David C. Miller, general director of the association, will be made available to retail furriers.

The dictionary is to include 265 trade names with descriptions of the furs named. Rules for advertising furs also have place in the dictionary, preceding the names of furs and their descriptions. The rules conform to the principles established by the London Fur Trade Association.

Any patron in doubt about the true nature of a fur, the association asserts, may consult the dictionary, which will be at hand in every retail fur establishment. Some of the popular

misnomers, which are considered and corrected in the dictionary, are: "Beaverette," defined as Beaver-dyed rabbit; "Bisam Mink," rightfully named natural muskrat; "Black Marten," the confusing title for black natural skunk; the so-called "Baltic" Leopard, Seal, Red Fox and White Fox, all of which, the dictionary says, are in reality Australian rabbit dyed to resemble the animals named. "Erminette" is revealed as white rabbit, and "Electric Seal" as seal-dyed rabbit.

The dictionary is to be revised annually to include additions suggested by practice and experience.

### A Record of Americanization

**S**INCE the establishment of the Americanization Bureau at Allentown, Pennsylvania, March 1, 1918, an average of 163 persons of foreign birth have been admitted annually to citizenship, compared to an average of 62 admissions before the bureau's establishment. The bureau is supported by the chamber and the county commissioners, and it serves the entire county. The local school board aids in the work by contributing \$500 a year as salary for the teaching of an evening Americanization school. The cost of operating the business is estimated at about \$3,000 a year.

All papers, declarations of intention, petitions for naturalization, depositions and similar documents may be prepared with the counsel and aid of the director of the bureau. The director also appears with the candidate for citizenship before the United States examiner, and the director accompanies the candidate when he appears in court for his final hearing.

### Autos Blaze Skalkaho Trail

**T**O BLAZE a new motor trail in Montana, the Skalkaho road, and to give words of good-will to communities along the trail, the chamber at Missoula planned a two-day automobile trip through the Bitter Root Valley to Anaconda and to Butte, a distance of about 300 miles. The party of tourists included 350 persons from Missoula, Hamilton, and the Bitter Root Valley. An aeroplane piloted the way across the mountains. The Missoula City Band and the Kiwanis drum corps accompanied the tourists.

At Anaconda and at Deer Lodge the tourists paraded on foot through the business districts. Entertainment provided by the chamber at Butte included a dinner and a dance.

### Rochester Has a Home Bureau

**M**ANAGEMENT of the household income is just as important as the earning of the income, counsels the home bureau of the Rochester chamber. The bureau operates through the home economics council of the chamber, and its membership this year is expected to reach 2,500. The membership includes twenty-six units located in various parts of the city. The members receive instruction in housekeeping, cooking, hygiene, sewing and similar subjects. Last year 798 meetings were held in club houses, school houses and parish houses, with a total attendance of 21,032 housekeepers. Five meetings were held every day through ten months of the year.

A definition of the purpose, scope and operation of the home bureau is presented by Elmer E. Fairchild, president of the chamber, in *Rochester Commerce*, published by the chamber:

"The home bureau is not a welfare organization. It is based wholly on economics. In no wise does it presume to encroach on the work of the splendid organizations functioning in the fields of charity and philanthropy. While it cooperates with these, and other organizations, it keeps to its own course, realizing that it has a field of its own that is distinctive and worth while.

"The home bureau is primarily a voluntary service organization. That is to say, it has a minimum of paid supervision and a maximum of voluntary service on the part of its mem-

bers. Its being organized into numerous neighborhood groups makes it possible for each group to adopt programs suitable to its own needs as well as to bring out a variety of talent for leadership in the various home-making projects. The home bureau in a very true sense is a great help-one-another club for the housewives of Rochester, present and prospective. Its membership includes a number of college-trained women in home economics who give service through the home bureau to housewives in the way of project leadership.

"The home bureau operates under the home economics council of the chamber of commerce. Bureau members are not members of the chamber, but the council members are. The present president of the chamber is chairman, and the first vice-president treasurer, while the general secretary of the chamber is the active manager of the council. This arrangement insures for the bureau the same careful and efficient management of its affairs as is received by the other chamber activities. Funds of the bureau are kept separate from chamber funds, and a separate audit is filed with the board of supervisors once each year."

### Conference on Street Safety

**T**HE PARTICIPATION of the Chamber of Commerce of the United States in the conference on street and highway safety, organized by Secretary Hoover of the Department of Commerce, has been authorized by the board of directors. Other organizations which will be represented in the work of the conference include: The American Automobile Association, the National Automobile Chamber of Commerce, the National Bureau of Casualty and Surety Underwriters, the American Mutual Alliance, the American Railway Association, the National Safety Council, and the American Engineering Council.

Preliminary investigations are to be made by eight special committees appointed by Secretary Hoover, and the reports of the committees will be considered at a conference to which all national organizations interested in traffic safety will be invited.

Writing of the importance of the conference, President Grant said:

It is unnecessary to urge the importance which the conclusions of this conference, based upon the findings and recommendations of these expert committees, will have for every community. The results should not only assist in reducing the toll of accidents but should also be of great service in expediting and facilitating street and highway transportation.

I am advised that the Director of the Conference will be very glad to have suggestions from any commercial organizations interested in these problems. Such communications should be addressed to Conference on Street and Highway Safety, Department of Commerce, Washington.

### Prizes for Essays on Chemistry

**T**HE IMPORTANCE of chemistry to our national life has fresh recognition in the American Chemical Society's second prize contest, which offers prizes and scholarships to pupils in high schools and secondary schools, and prizes to college students. Mr. and Mrs. Francis P. Garvan, of New York, have again provided the money for the contest.

Prizes in the high school and secondary school contest include six scholarships to Yale University or Vassar College with tuition fees and \$500 annually for four years, but only first prize winners in the state and territorial contests will be eligible to compete for the scholarships. Six prizes of \$20 in gold will be awarded for the best essays written by high and secondary school pupils on each of six designated subjects in each of the states and the District of Columbia, and in the extra-territorial possessions of the United States considered as a unit. Six prizes of \$1,000 each will be awarded to the students of colle-



giate grade who write the best essays on the designated subjects.

Information on the requirements and rules of the contest is obtainable from the Society's Committee on Prize Essays, 85 Beaver Street, New York City.

### Prizes Given for Good Roads

AN ANNUAL road-dragging contest is now an established feature of the program of rural development undertaken by the Greater Burlington Association, Burlington, Iowa. Early each spring the dragmen and patrolmen of Henderson and Des Moines counties attend a good-roads meeting held under the auspices of the Greater Burlington Association. Talks are given by experts on methods of dragging and upkeep of dirt roads, and announcement is made that six prizes will be given for the best kept sections of primary road and best kept county and township road from May 1 to September 15, the dates that include the road-dragging period.

A committee of five judges is appointed. Some of the judges are selected by the Association, and some are selected by the county board of supervisors. Only the appointing power and the judges themselves know of the appointments, but the judges are men who make constant use of the roads. No member of the committee even knows who his fellow committeemen are. Each judge makes individual inspections and report.

At the end of the road-dragging season the reports are compared and a decision made as to the best kept road section. The prizes in money are awarded to sections, not to men. The awards are so safeguarded that the jury does not know what dragman had charge of the part of road to which the prize is awarded. A meeting of dragmen is then called and the winning sections are announced. As the announcements are made, the dragman in charge of each winning section rises and claims the award.

### Conference on Cost Accounting

THE SITUATION with reference to the legality of trade association cost accounting activities was explained and discussed at the conference on uniform cost accounting, organized by the Department of Manufacture of the Chamber of Commerce of the United States and held in Chicago. Uniform cost accounting has not been directly and independently the subject of a court or Federal Trade Commission review except in the case of the Trade Commission against the United Typothetae of America, which ended about a year ago. The case was discussed by E. T. Miller, secretary of the Typothetae organization, and Chester Arthur Legg, its counsel. There has been an exchange of correspondence between the counsel for the Typothetae and Huston Thompson, chairman of the commission, in interpretation of the order issued by the commission.

A similar exchange of correspondence between E. W. McCullough, manager of the Department of Manufacture of the Chamber, and N. B. Gaskill, another member of the commission, has provided a better understanding of the commission's position. Mr. Gaskill has recorded his personal opinion that "as long as the principles of cost accounting methods are sound and the methods used are adopted to secure accuracy of individual results, and provided that the results are not used directly or indirectly for ulterior purposes of an illegal character, the Federal Trade Commission is in favor of the study of uniform cost accounting by trade associations or otherwise."

In addition to the legal aspects of cost accounting, the progress made by many industries with their uniform cost systems was reported at the conference.

### Asheville's "Program of Progress"

A LIST of major objectives to be attained by the city of Asheville, N. C., during the next five years, is included in "Asheville's Program of Progress," a report made by a special committee to the mayor and city commissioners, and to the officers and members of the chamber of commerce. The report presents its recommendations



These two links were placed in the same line of chain as a test. Observe them. One is all in, one nearly as good as ever.

WE CANNOT over-emphasize the wearing quality of TISCO manganese steel. Again and again the superiority of this alloy has been generally acknowledged. It is extremely tough and hard; hardness without brittleness.

TISCO manganese steel, produced exclusively by this company, is treated by the original Taylor-Hadfield process, by which, *alone*, can be obtained that combination of toughness and hardness essential to maximum durability.

TISCO detachable link chain is one of our most staple products. We manufacture it in a variety of standard types, but we are also prepared to produce any special design required. Special attention is given to the solving of any difficult and unusual steel problem. In fact, such problems are solicited.

Special bulletins covering the following products are available:

Coal and Coke Handling Machines	Hollow Rollers for Conveying Purposes
Cylinders for High-Pressure Gases	Mine and Skip Car Wheels
Chain and Sprockets	Pulp and Paper Mill Castings
Dipper Teeth	Steam Shovel and Dredge Parts
Gears and Pinions	Special Railway Trackwork
Gyratory and Jaw Crusher Parts	Steel Castings

### Taylor-Wharton Iron & Steel Co.

High Bridge, New Jersey

Sole owner of the Hibbard-Rose Patents covering basic processes for the electric manufacture of manganese steel





## Who

Select one of your particularly good business friends. You want to give him something for Christmas.

## What

What shall it be? Something that will last a while, or something soon gone? Something that you by your own test know is good, or something else? Something that will have a definite value to him, or something *anyone* would think of? Something that will express you because it evidences your trend in business thinking, or something indistinguishable from a hundred gifts? . . . We suggest that you give your friend a subscription to *The NATION'S BUSINESS*.

## Why

(1) *The NATION'S BUSINESS* is mentally stimulating. (2) It is interesting. (3) More men are reading it every day; a year ago there were 118,000—today, 163,000. (4) It provides fuel for the business imagination from which money-producing ideas come. (5) It keeps the busy reader in touch with business here and abroad, and—a thing which grows more important by the hour—in touch with government's relations with business. (6) It comes monthly, thus bringing an ever recurring good-will thought to your friend's mind, thirty-six monthly Christmas remembrances in *one* gift. (7) The first copy would come to him with Editor Thorpe's personal letter of welcome, on special stationery, announcing *your* gift.

## When

We'll make it our business to see that his first copy, together with the letter telling of your gift, gets to him *just before Christmas*.

## Where

We suggest that you give us his *home* address. More and more of our readers are asking that *The NATION'S BUSINESS* be sent to their homes.

## How

Send us his name and address on the coupon below and we will enter him for the full term-subscription at \$7.50 (36 months). It is not necessary to send the money now, we'll bill you after the first of next year.

Date \_\_\_\_\_

To the United States  
Chamber of Commerce  
Washington, D. C.

Enter the following for a full term-subscription to *NATION'S BUSINESS*, first copy to arrive at Christmastime with your letter announcing my gift. Charge to me at \$7.50, billing me after the first of next year.

(HIS NAME HERE)

Send to \_\_\_\_\_

Address \_\_\_\_\_

City & State \_\_\_\_\_

(YOUR NAME HERE)

My Name \_\_\_\_\_

Address \_\_\_\_\_

City & State \_\_\_\_\_

in five divisions: civic, commercial, industrial, agricultural, and transportation.

Among the recommendations which foreshadow greater publicity for the city and its institutions are that the city commissioners and the chamber of commerce obtain the establishment of a radio broadcasting station to be operated under public or private auspices, and that a fund of \$100,000 be obtained for the national advertising of the city.

### Real Estate Men Study Securities

**T**HE NATIONAL Association of Real Estate Boards, through its division of mortgage and finance, is making a comparison of tax-exempt securities and real estate securities with regard to their return value. The comparison will include returns after taxes have been deducted from real estate mortgages and real estate bonds, and the income-producing value of these securities with national, state and municipal issues with tax exemptions.

Frank Lincoln Johnson, of Chicago, chairman-elect of the mortgage and finance division for 1925, is making the preliminary analysis of the comparative return values of the two types of securities.

### A State Council of Retailers

**R**EPRESENTATIVES of retail associations in California have taken preliminary steps to establish a state council of retail merchants which would provide information on modern and efficient practices of retail distribution. The organization would make use of available facilities to coordinate the points of view of the legislative committees of the several retail bodies. It would establish means not only for quickly taking a referendum, but it would also send information throughout the state on legislative matters so that each retail group would know the position of all the other groups.

### Round Tables for Retailers

**A**SERIES of weekly round tables to facilitate discussion of the major problems of retail merchandising will be held throughout the fall and winter by the Retail Merchants Association of San Francisco, an affiliated organization of the chamber. Store executives and their junior associates will meet with expert retail technicians. The sessions will be held once a week and the topics will include: Store organization, fiscal control, personnel, merchandising, public relations, and retail distribution.

The first meeting was announced for October 13, the last for May 4.

### Special Fund for Industrial Facts

**A**N INDUSTRIAL fund of more than \$50,000 has been raised by the chamber at Alexandria, Louisiana. The fund will be used to finance the preparation of commercial information which will be made available to outside industries seeking new locations. The fund is administered by a board of trustees, which includes the president of the chamber and the presidents of the local banks. Subscriptions to the fund are collected direct by the banks on a monthly, quarterly, semi-monthly or annual basis, as may be designated by the subscriber through the bank of his selection.

### Chamber Bowling League at Albany

**T**HE RECREATION committee of the chamber at Albany, New York, has arranged for the fifth winter season of the chamber bowling league. In the league are a number of Albany concerns, which are represented by teams of their employees. Information regarding the league and the arrangement of the schedule may be obtained from the secretary of the Albany chamber.

### New Foreign Commerce Handbook

**A**REVIEW of the constructive action taken by the Chamber of Commerce of the United States with reference to foreign trade matters has been published by the Foreign Commerce



Department of the Chamber in its "Foreign Commerce Handbook, 1924-1925."

Among the important topics acted upon by the Chamber are the following: Support of the foreign service of the Departments of State and Commerce, passports and visas, tariff principles, free zones, taxation of Americans abroad, standards of quality, China Trade Act, Yangtze River patrol, parcel post with Cuba, foreign chambers in the United States, American chambers of commerce abroad, foreign student exchange, merchant marine act, investments abroad, treaty relations, Webb-Pomerene Act, and commercial arbitration.

The handbook also contains 90 separate headings under which the National Chamber's Foreign Commerce Department directs the attention of exporters and importers to American sources of foreign trade information and foreign trade service.

### A Directory for Trading Abroad

**THE EXTENT** to which American business and the American Government has established offices abroad for the promotion of American trade is indicated in a recent publication of the Foreign Commerce Department of the Chamber of Commerce of the United States, entitled "United States Trade Promotion Agencies Abroad."

There are 40 American chambers of commerce in cities in foreign countries and in dependencies of the United States. The Government Department of Commerce has commercial attaches and trade commissioners at 40 posts abroad. In addition to this number there are the American consular and diplomatic officials located in 415 different cities throughout foreign countries in Europe, North America, Central America, West Indies, South America, Asia, Oceania, and Africa.

The National Chamber of Commerce is providing this publication—which may be obtained from the Chamber of Commerce of the United States at Washington—in order that its members may make contacts quickly in foreign countries with the government officials and commercial organizations concerned with the advancement of American trade.

### Coming Business Conventions

Date	City	Organization
December		
2.....	Chicago.....	American Association of Creamery Butter Manufacturers.
2.....	New York.....	Pencil Makers Association.
3.....	Pittsburgh.....	American Corn Millers Federation.
3-4.....	Chicago.....	Coal Mining Institute of America.
3-5.....	Chicago.....	International Association of Fairs and Expositions.
3-5.....	Chicago.....	National Association of Amusement Parks.
4.....	New York.....	American Acceptance Council.
4-5.....	New York.....	Toy Manufacturers of the U. S. A.
5.....	Chicago.....	Automotive Manufacturers Association.
8-12.....	Chicago.....	American Warehousemen's Association.
9.....	.....	Eastern Paving Brick Manufacturers Association.
9-10.....	Pittsburgh.....	National Glass Distributors Association.
9.....	New York.....	Shoe Polish Manufacturers Association of America.
9.....	Asheville.....	Southern Hotel Association.
10.....	Chicago.....	American Malleable Castings Association.
10.....	Barre, Vt.....	Granite Manufacturers Association, Inc.
10.....	New York.....	Linseed Association.
2d week.....	New York.....	Insecticide and Disinfectant Manufacturers Association.
16.....	.....	Cotton Yarn Merchants Association.

Other conventions announced to take place during the month included those of the Association of Life Insurance Presidents, Carded Woolen Manufacturers Association, Face Brick Dealers Association of America, Insurance Federation of America, International Association of Garment Manufacturers, National Distributors Association, National Mineral Water and Beverage Association, National Paving Brick Manufacturers Association, Northwestern Tow Boat Owners Association, Rite-Grade Shingle Association, Inc., Steel Barrel Manufacturers Association, Synthetic Organic Chemical Manufacturers Association of the U. S. A., United States Potters Association, Upholstery Association of America, National Drug Trade Conference.

## Are Last Year's Papers "Filed" Like This?

Did you ever wait for an important paper to be found among the dirty, disorderly bundles of last year's "transferred" correspondence?

Well, transfer time is here again!

And you never had a better chance to put your transferring on the right basis. Van Dorn transfer cases not only are neat, strong, and dustproof, but cost so little that you can afford to have *enough* of them!

You'll be many times repaid for sending for the catalog or stopping in at the dealer's to see this case.

The Van Dorn Iron Works Co.  
Cleveland, Ohio

Branches:  
Cleveland  
New York  
Chicago

**Van Dorn**  
MASTERCRAFTSMANSHIP  
IN STEEL

Branches:  
Philadelphia  
Washington  
Pittsburgh







Goldsboro's New Hotel

## If Your Town NEEDS a Hotel—

We'll arrange for the financing of your new hotel if your town really needs one. But show us first that you need it!

Goldsboro, N. C., actually needed a hotel. Today, Goldsboro is erecting her new hotel with funds provided for the purpose by the Hockenbury organization.

If you think your town needs additional, more modern hotel facilities, ask us to place your name on our complimentary civic list, "C-12," to receive a copy of **THE HOTEL FINANCIALIST**, a monthly journal devoted to community hotel finance and showing how other cities are meeting their hotel shortage.

Hockenbury financed hotels are in every quarter of the country. There may just as well be one in YOUR town!

**The HOCKENBURY SYSTEM, Inc.**  
• Penn-Harris Trust Bldg. •  
• HARRISBURG-PENNA. •

## Recent Federal Trade Cases

THE COMMISSION does not like the way in which a Chicago creamery played tag with the cans of farmers who sold cream or butter fat to creameries in the same territory. On investigation of the case the commission has issued a prohibitory order to the Chicago company which requires that it discontinue attaching shipping instructions to cans not belonging to it without the consent of the owners.

Supplies of cream or butter fat are obtained by the Chicago company and many of its competitors, the commission explains, by the so-called "direct shipment plan"—that is, the farmer ships his product direct to a creamery in cans which are his own property. The only shipping instructions to the railroad or express agent are usually on a detachable tag, the farmer sometimes being supplied with tags by different creameries so that he may use his own judgment as to where the full cans are to be shipped.

The Chicago company's practice, so the findings say, was to attach permanently to the farmers' cans shipping instructions directing all transportation companies to ship the cream in the cans so tagged to the Chicago company. The tags were attached by means of welding or soldering and could not be readily detached or obliterated. The commission also found, it reports, that because of the methods alleged to have been used by the Chicago company, many shipments of cream intended for competitors were diverted and delivered to the Chicago company contrary to the desire of the shippers. The Chicago company operates creameries in Nebraska, Iowa, Illinois, Indiana, Ohio, Wisconsin, Michigan, Kansas, Missouri, and Kentucky.

TO THE commission's way of thinking, barley malt extract made in the United States has no business to masquerade under foreign-looking labels. In this case a citation has been issued against a Philadelphia trading as an "import company." The business considered in the complaint is the retail selling of merchandise of various sorts alleged to have been bought from concerns located in the United States. Included in the merchandise, the commission says, is a barley malt extract.

The complaint alleges that the "import company" does not import any of its merchandise and is neither a wholesaler nor a manufacturer, and that the public is therefore misled and deceived by the trade name as well as by slogans used on letterheads and billheads, which read "Importers-Manufacturers-Jobbers," and "European Office, Munich, Germany."

Among other things, the complaint continues, the "import company" sold a product advertised and described as "Imported Bavarian Style Old Time Malt Extract," and that all of the words of that description were in conspicuous type except the word "style." The product so described, the commission contends, is an extract of barley malt and is not manufactured in a foreign country, is not imported into the United States, but is manufactured, bought by the "import company," and by it resold—all within the United States.

The citation in this case asserts that a considerable part of the purchasing public has a preference for imported merchandise over domestic products, and is therefore misled and deceived into the mistaken belief that the barley malt extract sold by the Philadelphia firm is an imported product.

UNFAIR methods of competition in the marketing of coal to South America are charged against a New York company and a coal-mining

company with offices in Philadelphia. The two companies have the same president, and he is also cited in the complaint.

In the course of their business in export trade, the complaint charges, the companies have accepted orders and received payment from foreign customers, for coal of a specified quality and quantity to be delivered in several shipments at specified times, and wilfully or through negligence have caused to be delivered for the coal so ordered coal of a quality inferior to the specifications, and have failed to make deliveries in the quantities and at the times specified. On the contrary, the complaint asserts, deliveries of inferior coal have been made and in less quantities and at later dates than specified, the total quantity being much less than the total quantity ordered, practices which the commission holds are unfair to competitors in the United States engaged in foreign commerce who bid on and supply goods of the desired quantity and quality, and ship at the

specified time. The companies cited, the commission says, bring into disrepute and injuriously affect the entire exporting trade of the United States, and unfairly injure all competitors who fulfill their agreements and undertakings.

According to the complaint, the companies represented that they were unable to make deliveries under existing contracts, although at the same time repeated offers were made to the same purchasers to ship larger quantities of coal of the same kind and quality but at greatly increased prices, and that shipments would be made under the original contract provided the purchasers agreed to pay an increased price and to enter into contracts for additional shipments of coal at increased prices.

Further allegations of the complaint are that the companies, in order to defeat the purposes of alleged export regulations of the United States, which restricted the export of coal to a certain percentage of the contract quantity, proposed to the Central Argentine Railway, Ltd., that it enter into a fictitious contract for 200,000 tons of coal, the railway at the same time to receive a letter from the companies to the effect that the contract was in effect for only 50,000 tons. The railway refused to accept the alleged proposal, the commission says.

The complaint asserts that when the general buying public in South America is deceived either as to the quality, quantity or prices of goods ordered, or as to the services agreed on, the foreign buyer is not willing to overlook the deception and continue trading. The methods alleged to have been used by the two companies in the conduct of their export business, according to the citation, have injured and damaged generally the reputation and the business of persons of the United States lawfully competing with the companies in export trade, and have brought such competitors into disrepute with purchasers in South America.

CHARGING misrepresentation and misbranding in the advertisement and sale of cigars, the commission has issued a complaint against a New York manufacturer of cigars. The cigars are sold to wholesale and retail dealers throughout the United States, so the complaint says. The manufacturer, the commission asserts, has caused labels to be placed on cigars which he markets bearing the words "Havana," "Vuelta," "Abajo," and "Garcia," either alone or in combination with other words. The citation says that the cigars so labeled are not made wholly of Cuban-grown tobacco, and that the name "Garcia" was first used by the manufacturer. Fur-

THIS article outlines some of the charges, findings and orders issued by the commission in consideration of complaints proceeding from trade practices in connection with:

Barley Malt Extract  
Cigars  
Coal

Cream, Butter Fat  
House Furnishings  
Machinists' Tools  
Periodicals



Entire Contents © 1924 A. W. P. Co.



## Vaults cannot protect records against the ravages of time!

*Long life is one of the four factors  
considered in The Specification Chart*

THE introduction of wood into the manufacture of paper has brought about changes with which the greater portion of the public is unfamiliar.

Newspaper stock is made entirely of wood. Librarians are endeavoring to induce newspaper publishers to print a small edition on rag paper for filing copies. A librarian in a large eastern city writes of newspaper: "As guardians of the printed records, we are laying up a mound of trouble for ourselves by putting away for future generations records in this shape, which begin to crumble almost before they are bound." The American Library Association has made specific recommendations on this subject.\*

This subject is of equal importance to business men, who may unknowingly prepare documents of the utmost importance on papers made only for temporary use. You may rely upon the Specification Chart for guidance in this matter. Long life is one of the four major factors considered in the preparation of the Specification Chart.

Out of the chaos of paper grades, the American Writing Paper Company has scientifically graded nine bond papers (see Grade Chart) which cover every bond paper need. These papers—Eagle-A Bonds—are produced in volume, providing greatest possible value in each grade, and the Specification Chart is the guide to their best use—bringing to you the right paper for the purpose, at the right price.

\*If you are interested in detail in this phase of paper, you should consult Vol. 23, No. 3 (pages 210-221) of the Quarterly Bulletin of the American Library Association. You will undoubtedly find this on file in your local library.

Considering life and probable handling, the Specification Chart distributes the nine basic grades of Eagle-A Bond Paper into three primary groups—permanent papers, semi-permanent papers, and temporary papers.

Proper care of records requires paper in all three groups. Daily time sheets, receiving reports, inter-department letters, etc., are usually short lived, require little handling, and a temporary paper is all that is required.

Recapitulations of temporary records, for semi-permanent filing and letterheads for commercial uses, require a good grade of rag-content paper, due to the probable handling they will receive, and their need for preservation.

Yearly recapitulations, contracts, deeds, etc., are permanent and lasting records, and require a permanent and lasting paper.

The Specification Chart has been adopted by leading business houses and representative printers throughout the country. A copy of the Chart in convenient form will be sent to you upon request and with it a booklet, "The Correct Use of Bond Papers" and a sample portfolio of the Nine Eagle-A Bond Papers as additional guides.

AMERICAN WRITING PAPER COMPANY  
Makers of Eagle-A Bonds, Linens, Ledgers, Covers,  
Book Papers and Announcements  
Holyoke, Massachusetts



This trademark identifies Eagle-A Bond

# EAGLE-A *Bond* PAPERS

When writing to AMERICAN WRITING PAPER COMPANY please mention the Nation's Business

### THE SPECIFICATION CHART OF BOND PAPER USES

Each of these nine grades of Eagle-A Bond Paper is produced on a volume basis, with all the resulting economy in manufacture and distribution.

The Controlling Factors in the use of all Bond Papers

	PERMANENT	SEMI-PERMANENT	TEMPORARY
Rag Content Papers			
Corporation Bond			
Agreement Bond			
Permanent Bond			
Contract Bond			
Airpost Bond			
Chevron Bond			
Acceptance Bond			
Norman Bond			
Telephone Bond			
Chief uses of paper in modern business			
Letterheads	A1	2	3
Invoices	A1	2	3
Statements	A1	1	2
Checks		1	2
Receipts		1	2
Notes		1	2
Purchase Orders		1	2
Contracts	A1	1	2
Receipts		1	2
Inter Dept. Letters			1 2 3
File Copies			1 2 3
Acknowledgments		1	2
Price Lists		1	2 3
Receipts	A1	2	3
Deeds	A1		
Stock Certificates	A1	2	3
Policies	A1	2	3
Inventory Forms		1	2 3
Requisitions		1	2 3
Mfg. Orders		1	2 3
Receiving Reports			1 2 3
Stock Reports		1	2 3
Time Sheets			1 2 3
Memo Slips			1 2 3
Reference Booklets			1 2 3

#### KEY TO ABOVE CHART

A1—Extra First Choice 1—First Choice  
2—Second Choice 3—Third Choice  
\*Recommended for Offset Lithography

Four factors are considered in the above classifications: (a) Appearance, (b) Long Life, (c) Printing Qualities, (d) Probable Handling (in office, in mail and at destination). First choice provides maximum service; others a slight sacrifice of one or more of the above factors, as indicated in the Grade Chart.

#### THE GRADE CHART

The Grade Chart indicates the relative price-quality position of each of the Nine Eagle-A grades.

These nine grades cover every bond paper need. The Grade Chart supplements the Specification Chart, and will assist the buyer in determining whether a first, second or third choice should be made.

It is also an accurate presentation of the bond paper standards governing the nine Eagle-A basic grades.



Eagle-A COUPON BOND is recognized as 100%. The other grades are all shown in price and quality relation to it—represented by the solid black line (100%). The shaded portion (100%) indicates the relative sacrifice in quality factors (Appearance, Long Life, Printing Qualities, and Probable Handling).

*The right paper  
for the purpose*





## Meeting competition in distant markets

**A**N association of California raisin-growers selling tons of raisins in India—a far western creamery shipping its entire output to the city of Boston—

Yet India can get raisins from Afghanistan—at its door—and Boston can purchase from nearby creameries.

How are such markets made profitable to enterprising business men so far away from them?

*Largely through financial service that speeds up distribution and thus helps to overcome the factor of distance in competition.*

\* \* \*

Customers of the Irving-Columbia are buying and selling thousands of miles from home with as much assurance as they formerly dealt with neighboring towns.

Through correspondents and representatives in virtually every trading center of importance in this country and abroad, the Irving-Columbia can quickly furnish credit information, make collections and save time in many operations that influence profit.

For the convenience of our out-of-town customers, this complete service, backed by all the resources and facilities of a great financial institution, is now concentrated in our Out-of-Town Office.

**IRVING BANK-COLUMBIA  
TRUST COMPANY**  
NEW YORK

*When writing to IRVING BANK-COLUMBIA TRUST COMPANY please mention the Nation's Business*

ther charges made are to the effect that the manufacturer, in connection with a certain design or drawing, registered by him as a trade-mark, has used the words "Garcia," "A Mild Havana," and others together with the inscription that the title was registered and designed, was owned by him, and was registered in the United States Patent Office. The complaint alleges that the manufacturer's registered trade-mark consists simply of a design or drawing without words or title whatever in connection with any design or drawing, and that his methods are not only misleading to the purchasing public but are unfair to competitors who truthfully advertise and label their products.

**A**LL ARE not *Saturday Evening Posts* that are weeklies. That conclusion is developed in charges against a magazine publisher of Burlington, Iowa. According to the complaint, he issues a weekly publication under the name "The Saturday Evening Post." His publication, the commission believes, is not connected with *The Saturday Evening Post*, which has been published by the Curtis Publishing Company for many years. It is further charged that the Burlington publisher, through advertisements in different newspapers and other publications and through the personal solicitation of agents, sought to obtain subscriptions to his publication by deceiving the public into belief that the periodical so represented was *The Saturday Evening Post* published by the Curtis Publishing Company.

**A**TOOL manufacturing company of New York City and Rochelle Park, New Jersey, is charged with unfair methods of competition in the exploitation of steel rulers upon which it causes to be stamped the brand "B & S." Among the competitors of the company, the citation explains, is the Brown & Sharpe Manufacturing Company of Providence, Rhode Island, which for more than twenty years has sold numerous machinists' tools under the brand or legend "B & S." The complaint alleges that the use of the brand "B & S" by the tool company cited has a tendency to deceive the purchasing public into the erroneous belief that the steel rulers which it sells so branded are products of the Brown & Sharpe Manufacturing Company, its competitor, and causes the purchase of its products in that belief.

**P**RACTICES in connection with the exporting of lumber to Italy are under investigation by the commission. A complaint issued against an export association and a business man of New York City charges that they caused certificates to be made and delivered to purchasers in Italy, that the certificate falsely represented that the lumber exported had been measured and inspected by the Lumbermen's Bureau of Washington, D. C., and that the lumber had been declared and certified by the Bureau to be of the kind, quality, and dimensions required by the contracts and as described in invoices and certificates. The lumber was neither measured nor inspected by the Lumbermen's Bureau, and was not lumber of the kind, nor the quality represented in the certificates, according to the commission's contention. The alleged acts, avers the commission, are to the injury of the United States export trade in lumber, and to the disrepute abroad of competitors that fulfill contracts.

**A**QUIRING the whole of the stock or share capital of a competing company with the effect of substantially lessening competition and creating a monopoly in the automobile wheel industry is charged in a citation directed to a motor wheel corporation of Lansing, Michigan. The complaint alleges that the corporation acquired the whole of the stock or share capital of another manufacturer of steel disc automobile wheels. Acquisition of that kind is contrary to law, the complaint asserts, and is a violation of the Clayton Act in that it has a tendency to restrain commerce in the sale of steel disc wheels for automobiles in the section of the United States in which the two companies sold their products.

Similar charges were made against a wheel company of Jackson, Michigan.



Automobiles  
& TrucksTextile  
MachinerySteel Mill  
EquipmentLine  
Shafting

## A Real Factor— The Bearings

**E**FFECTIVE operation of any mechanical equipment depends very largely on the bearings. They are the points of attack that must be able to stand up against the destructive forces of daily operation.

Hyatt roller bearings are built to stand up. Their development over a period of 30 years in equipment of all kinds has resulted in a series of types to meet practically any requirement.

Not only do these bearings give dependable service, but by eliminating plain bearing friction they permit wheels and shafts to turn more freely—with resulting substantial savings in power and lubrication.

When your engineers specify Hyatt bearings it is to insure reliable and economical performance of your equipment—whether the equipment you use or that which you manufacture for others.

Write for further information. Hyatt engineers are prepared to cooperate in a study of your bearing problems without obligation.

### HYATT ROLLER BEARING COMPANY

NEWARK DETROIT CHICAGO SAN FRANCISCO  
WORCESTER PHILADELPHIA PITTSBURGH  
CLEVELAND MILWAUKEE



Conveyors



Railway Cars

Logging  
MachineryContractors  
EquipmentCranes, Trolleys  
and Hoists

Mine Cars

Farm  
ImplementsIndustrial and  
Freight TrucksElectric  
Motors

Tractors





## Like a Thief in the Night

Disease can creep unsuspected on your system "Like a Thief in the Night." A number of serious ailments such as Bright's disease can develop to a chronic stage without your knowing it.

There is one sure way to guard against this. It is to have **HEALTH PROTECTION**.

Real Health Protection is afforded by having a periodical Urinalysis which detects the beginning of most internal troubles. Many of these can be stopped by such simple means as a change of diet.

Our Service gives you Health Protection in the most scientific, effective and economical manner.

The small amount of time and money it costs you may save the expense, loss and worry of serious illness.

It costs you nothing to investigate. It may save you more than money can buy.

### National Bureau of Analysis

F. G. SOULE, President and Founder  
N. B. 124, Republic Bldg. Chicago, Ill.

National Bureau of Analysis,  
N. B. 124 Republic Bldg.,  
Chicago, Ill.

Please send me, without obligation, your booklet, "The Span of Life," and full particulars of your plan.

Name.....

Address.....

## Government Aids to Business

The average power plant is operated with a considerable loss of fuel in the form of unconsumed combustible matter, says a report issued by the Bureau of Mines.

### Fuel Recovery From Refuse of Boiler Plants

In actual practice, according to the report, the quantity of unconsumed combustible in the boiler refuse may range from a few per cent to 40 or 50 per cent, and the refuse may be 10 to 20 per cent of the fuel fired.

Assuming that the coal burned contains 12 per cent of ash, and allowing for flue dust losses, the report says that approximately 2 per cent of the coal will be lost in the unconsumed refuse. Where the coal used daily amounts to hundreds of tons, an appreciable economy could be effected by recovering the unburned fuel.

Not much attention has been paid in this country to recovery of the unburned fuel, the report says, but in Europe considerable experimenting has developed several types of machines for reclaiming combustible matter from boiler or furnace refuse. Satisfactory results have been obtained from a machine operating on the magnetic principle—separation of the combustible and the noncombustible is accomplished by the magnet's attraction of the clinker, in which iron is present.

The process is described in Serial 2634, "Magnetic recovery of combustible in boiler plant refuse." Copies of the serial are obtainable from the Department of the Interior, Bureau of Mines, Washington, D. C.

No authority has been granted by the Bureau of Standards, it asserts, for the use of its name in connection with the sale of dry batteries for radio receiving sets.

### Bureau's Name Used in Selling Dry Batteries

No test results for competing brands of batteries have been published, according to the bureau, and it scores as unwarranted statements that it has declared any particular brand to be the best or that it has rated certain brands above others.

Tests which have been made in its laboratories, the bureau explains were primarily for the information of government departments, but assistance has been given also to various manufacturers who have cooperated in the conferences. In 1919 specifications for dry cells and batteries were published by the bureau. The specifications were revised and republished in 1923 as Standard Specifications No. 58 of the Federal Specifications Board.

The revisions involved raising the requirements for performance, but it is noticeable, the bureau says, that a larger percentage of the brands now on the market meet or exceed the specifications than when they were originally formulated, indicating that the average quality of the product has been considerably improved.

A second edition of Circular 100 of the Bureau of Standards has recently been issued, and may be obtained from the Superintendent of Documents at 20 cents a copy. The paper considers the forms, uses, and alloys of nickel.

### Forms of Nickel, Its Alloys and Industrial Uses

The larger part of the world's production of nickel, says the bureau, comes from the pyrrhotite ores of the Sudbury district of Canada. These ores are smelted and refined by three processes. A natural alloy, Monel metal, is produced from the same ores by roasting and reducing the copper-nickel matte shipped to New Jersey from the Canadian smelters.

Nickel is produced in the United States in several commercial forms, including 50 or 25 pound ingots or pigs used in the manufacture of nickel-bearing alloy steels; nickel shot, and electrolytic nickel cathodes which are used in the manufacture

## Many businesses will die in December—Watch!

By far the larger number of all business failures occur in the months of December and January. That fact holds a special message for you today. Act upon it and you will avoid losses. New Year, with its annual inventory and balance, is right at you. You want your books as clean as possible on that date.

**And there are some delinquent accounts on your books now which ordinary procedure will not clear up in time.**

Handling the overdue accounts of more than four thousand manufacturers and national distributors keeps us informed of impending wrecks—that knowledge is valuable to you. Use our specialized methods.

Let us get your money now, and get your debtor-dealer in a good humor so your salesman can put your merchandise back on his shelves early in the new year—that's good business.

Our specialized procedure leaves your debtor with an increased respect for your credit department—a better business man, less apt to again fall in arrears.

This helpful, constructive service costs you actually less than the unskillful kind. Mail them today and let us help you.

## UNITED MERCANTILE AGENCIES

Louisville, Kentucky

United Building

Collectors for Manufacturers and National Distributors





of nonferrous nickel alloys; nickel silver; and cupro nickel. Malleable nickel in the form of sheets, strips, rods and wire is made for stampings, fittings, resistance and pyro meter wire, spark plug points, and kitchen utensils. Nickel castings are used by the chemical industries because of their resistance to corrosive solutions.

Monel metal, which is made up in the usual forms of castings, rods, sheets, and wire, is principally valuable, the circular explains, because of its high strength at high temperatures, and its resistance to corrosion and to the erosive action of superheated steam—a property that makes it particularly adapted for use in steam turbines and valves.

From a study of 256 coal-mine explosions Interior Department engineers on the staff of the

### Critical Periods For Explosions in Coal Mines

Bureau of Mines have found that there are two critical times of day when explosions are most likely to occur. The critical period in the morning begins at 6 and ends at 9 o'clock, with a peak at 7:30 o'clock, indicating, the engineers believe, an emphasized hazard from gas ignition between those hours. The critical time in the afternoon was found to be between 3 and 7 o'clock, with a peak at 6 o'clock, traceable to the practice of shot-firing in the evening. Between these morning and evening critical periods is one which might be called the noon period, the engineers say—that is, from 11 o'clock to 1 o'clock, a period which is associated with the practice of shot-firing at noon.

The 256 coal-mine explosions studied by the bureau occurred in a period of fifteen years. The explosions killed 4,413 men, and injured 570 others. As a result of its findings, the bureau urges that extra vigilance should be exercised in coal-mining operations at the critical periods, particularly in the mornings, when many severe explosions have taken place, largely owing to the hazard of accumulation of gas during the night.

The results of the studies are presented in Serial 2638, "The critical time of day for coal-mine explosions," by L. D. Tracy, coal-mining engineer, and M. W. von Bernewitz, mining and metallurgical engineer. Copies of the serial may be obtained from the Department of the Interior, Bureau of Mines, Washington, D. C.

In making its investigation of the tarnishing of silver, the Bureau of Standards is considering

### Paper's Effect on Tarnishing of Silverware

the effects produced by the so-called anti-tarnish papers used for the wrapping of silverware. Tests were made on samples from several manufacturers. Specimens of silver wrapped with strips of the papers under test were placed in air-tight desiccators, which were then evacuated and refilled with purified air. One set of specimens was kept in a dry atmosphere and a similar set in a moist atmosphere for about one year. At the end of that time the specimens were examined and it was found that the tarnishing effect of the papers, although slight, was sufficient in some cases to be objectionable. The tarnishing effect was more pronounced on those specimens which were kept in the moist atmosphere, which confirms previous conclusions as to the effect of moisture in the tarnishing of silver.

Parcel post packages between the United States and Great Britain are now insurable. Effective from October 1,

### Britain and the United States in New Postal Pact

a new international parcel-post agreement makes provision for insurance, reciprocally, of international parcel-post packages between the United States and Great Britain. This is the first convention of the kind, except for Canada, to be negotiated between this country and a foreign power.

The new agreement provides that a minimum fee of 15 cents will be charged for a package having a value of not more than \$10, and a fee



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The present low interest rates are due to the large supply of funds available for credit. But Credit will tighten and higher interest rates obtain as capital finds investments.

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The Banker is the all important factor in such a structure. His judgment, in times such as the present, is vital to the future welfare of any business. *That he may give sound financial counsel and advice he must have carefully prepared facts and figures.*

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of 50 cents will be charged for a package having a value of not more than \$100. No parcel will be received for delivery which weighs more than 11 pounds.

The failure of a telegraph cable connecting Seattle and Alaska led to an investigation of the break by the Bureau of Standards. The bureau was to determine whether the failure of the steel supporting wires was caused by corrosion in salt water or to erosion against the sea bottom.

### Kink Causes Corrosion of Ocean Cable

About 4 feet from the broken end, the bureau reports, was a kink in the cable. At the kink the sharply bent wires had become very thin, and it is known, the bureau explains, that corrosion proceeds much more rapidly in strained than in unstrained metal.

From its investigation the bureau concludes that the thinning down of the wires at the kink was caused by the accelerated corrosion of the bent wires, and that probably a kink had also existed at the point where the cable broke. The appearance of the surfaces of the wires at the fractured end as shown under the microscope indicated that corrosion had taken place. Apparently, the failure resulted from permitting a kink to form during the laying of the cable against some object on the sea bottom.

The first series of specimens used in the Bureau of Standards' soil corrosion investigation have been examined, and a progress report is in preparation. This series includes one set of specimens from each of 46 locations distributed throughout the United States. Each set includes the following materials: Bessemer steel, open hearth steel, copperoid steel, spellerized steel, wrought iron, ingot iron, sand cast iron, duriron, lead pipe, lead cable sheath, and fiber pipe. About half of the sets include also specimens of De Lavoud centrifugal cast iron.

### Soil Corrosion Test Specimens Are Examined

The specimens have been in the ground for periods varying from one to two years. These specimens have now been cleaned, weighed, and inspected. A conference of representatives of pipe manufacturers for study and discussion of the results was held preliminary to preparation of the progress report.

United States Government Master Specifications for the construction of built-up bituminous roofing of various types are contained in Circulars 176 to 181 inclusive of the Bureau of Standards. The price of each circular from the Superintendent of Documents, Government Printing Office, Washington, D. C., is 5 cents.

### Specifications for Built-Up Roofing Issued

The specifications were prepared by the technical committee on bituminous waterproofing and roofing materials of the Federal Specifications Board. In their preparation, the bureau says, careful consideration was given to suggestions received from the manufacturers of the materials used, roofing contractors, large consumers of roofing and other interested persons.

The final results of four series of wear tests for comparing the durability of chrome and vegetable-tanned sole leathers,

### Chrome Sole Leather Best in Wear Test

as compiled by the Bureau of Standards, show a superiority of wearing quality for chrome leathers in each case. The margin of greater wear held by the chrome leathers, expressed in percentage, was 23.2, 111.5, 40.3, and 115.5. The chrome leather used in two series was filled with grease and mineral salt, in one series the natural chrome was used, and in the other series, the chrome leather was filled with paraffin.

## Reprints of Articles

appearing in this magazine may be ordered from The NATION'S BUSINESS, Washington.

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## Kings Come and Go —Lloyd's Lives On

WHEN anyone says "Lloyd's" to you, what do you think of? Do you not picture an English office, somewhat musty and dark, with clerks at high desks, quill pens, an atmosphere of stability—eternity, almost—as of the Bank of England, the Rock of Gibraltar, or the institution of matrimony? Perhaps you think of it as a family affair—something to do with shipping—presided over by a Mr. Lloyd, tall and thin, in a Prince Albert coat with white spats and Dundreary whiskers, assisted by Young Lloyd very nearly a replica of the Prince of Wales.

Well, there was once a Mr. Lloyd, a long time ago—in fact in the middle of the seventeenth century. But he was not frock-coated, frigid and formal. On the contrary, it was his cordial personality, his business-of-being-a-good-mixer, together with his shrewd perception of commercial values, that created "Lloyd's"—created it out of knowledge of the wants of men and readiness to supply them.

Edward Lloyd ran a coffee shop, about 1680, in Tower Street, London. Men came there to eat and drink and lingered to discuss their business with each other. The place prospered, and Lloyd moved it to Lombard Street, in the center of the city, where he drew patronage from men of large affairs. Through mixing constantly with his guests and studying them, he came to the realization that a weekly paper, giving news of commerce—but especially of shipping—would be eagerly received by them. He initiated the paper, under the name of *Lloyd's News*. This greatly increased the prestige of the coffee house, now a center for market intelligence as well as for good cheer. Insurance men, brokers, and shipowners gradually came to consider it their headquarters, and in 1774 these men organized under rules binding them together and rented quarters in the Royal Exchange, where they still are. With them they took the name—"Lloyd's."

Not until 1871 was this organization incorporated by Act of Parliament. But, contrary to popular notion, "Lloyd's" is not a marine insurance firm undertaking business as a corporation.

"Lloyd's" is indeed a marine insurance concern, but its business is conducted solely by its members on their own account. The business of "Lloyd's" as a corporation and of the committee as its executive is to conduct the affairs of "Lloyd's" in its corporate capacity, and to guard, as trustees, the corporate funds and property. It is "an association of English underwriters of marine insurance for the collection and distribution of maritime intelligence and the protection of their common interests and credit. . . ."

The name is familiar in every household all over the world. Perhaps through "Lloyd's Register" is it best known. This is "a list of the seagoing vessels of all nations classified according to seaworthiness by an association of British shipowners, shippers, and underwriters which maintains an inspection of hulls, engines, etc., and supervises British marine construction."

And "Lloyd's Calendar" is a publication "containing tables and data of value to officers of the merchant marine."

"Lloyd's" is a world intelligence service, in the field of marine, which has achieved its position of supremacy and prestige through the qualities of serviceability and reliability—the British idea of business. —G. H. H.



*An importer asked this question:*

### "How can your foreign offices help me?"

THIS was the answer: By carrying an interest-bearing account with either of the London offices or with the Paris office of The Equitable, you may—

1. Enjoy the advantages of an American bank, employing American methods, in the handling of your foreign business.
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## Chips from the Editor's Work Bench

AN APARTMENT house in Brookline is to publish a newspaper for the convenience of its tenants. Perhaps the goings and comings, and the "at homes" of the janitor will be chronicled. Nowadays janitors are men of importance, and are to be seen only at their pleasure. But they might be more inclined to give hearing to deserving tenants were these ranked without the audience chamber in the order of their appointments—and the newspaper might print the janitor's calendar day by day.

But whoever wanted to see a janitor, and then saw him? Perhaps the janitors have become infected with the commercial jargon



of the times, and merely ape the "in conference" of other great captains. The day of the absentee landlord has almost passed, but the day of the absentee janitor is upon us—and that day seems to be a "day off."

IN SIXTY-TWO cities in this country, in Canada, in Scotland, and in England, employees of the H. J. Heinz Company of Pittsburgh, to the aggregate number of 10,000, sat down at the same hour to a dinner served in celebration of the fifty-fifth anniversary of the founding of the company. Of course, everyone knows the things for which the Heinz Company is famous. But not many persons know that the Heinz Company has been in business fifty-five years, and that during all the time it has been blessed with industrial peace.

Speeches were broadcasted from Pittsburgh to all the dining halls. Perhaps the speakers took occasion to spice their talks with the virtues of pickles and preserves. And the spice of speeches, as well as of life, is packed in a variety of packages. Now it can be told that along with the spice, the peace and goodwill of the workers are packed in the famous "57 varieties."

ANNOUNCEMENT that the International Convention for the Simplification of Customs Formalities would go into effect on November 27 was calculated to give cause for thanksgiving to all Americans engaged in foreign trade. The flow of international commerce has been hampered by the diversity and complexity of the customs regulations which have been enforced at ports and boundaries throughout the world. The international convention holds promise of relieving the irksome burden of red tape, annoyance and delay imposed by the tortuous detail of merchandise entry at a foreign port.

Active in representing the world of business is the International Chamber of Commerce. Its envoys were audible and visible at the Geneva Conference, and it is now diligently concerned to put the customs convention in practice. Business men and customs officials in the several countries are being brought together for discussions of means to expedite ratification of the convention, and of methods



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In a few hours' time a carpenter could enlarge this room with his principal tool, a screw-driver

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**E**ITHER sideways or vertically, Telesco Partition will stretch to meet your growing needs, without expensive alterations or changes.

Standing staunch as a rock where you place it, it can be made into any new layout in a few hours' time.

The standard interchangeable units are fast-

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The extension top will reach to any height ceiling you require.

This movability, and its beautiful cabinet finish, have made it standard equipment for thousands of industries all over the country.

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for accomplishing not only the modifications approved by the convention, but also the local improvements of customs practice that may be suggested in the future.

All but one of the great commercial nations are now signatory to the convention. That one is the United States. True, our Government did have its eyes on the Geneva Conference, but its "observers" were consistently unofficial. By way of explanation, it may be offered that many of the reforms advocated by the convention were already included in our own customs practice. But certain other reforms urgently desired by American business were accomplished through American representation in the International Chamber of Commerce delegation. At any rate, American exporters and importers stand to benefit as much from the convention as though their Government were an avowed party to its provisions. And a blessing is no less a blessing for lack of a government stamp.

But it may well be that the convention will make an end of translating "O tempora! O mores!" to "Oh, what a time with the customs!"

**THE PRESIDENTIAL** campaign gave impetus to the popularity of the corn-cob pipe—the "Missouri meresham" of profane souls who know not its delights. When the pipe vote seemed about to rally 'round the inverted bowl sponsored by General Dawes, the Democrats countered with the distribution of several thousand corn-cob pipes bearing pictures of Mr. Davis and Mr. Bryan. The campaign did give new fame to the corn-cob pipe, but its use was only a political gesture—a mere finger-thrust in the vast sea of cobs.

But the cob may become useful in other ways. Scientists are working on processes to avoid the yearly waste of 20,000,000 cobs in the corn belt. They are investigating the pro-



duction from cobs of wood alcohol, charcoal, pitch, tar, oils, incense, punk, oxalic and acetic acids, and furfural.

If cobs are treated with phenol or cresol in the presence of an acid, say the investigators, a sticky mass is produced on heating. The mass then ages to a hard black substance which can be pressed into various shapes. Among the properties of furfural resins are infusibility and insolubility, high insulating qualities, great strength and resistance to water and chemicals. These resins can be used in the making of radio apparatus, phonograph records and similar articles.

So it may be that the lowly cob will be taken from practical politics for use of the equally practical professions—a sort of progress from declamation to reclamation. But the corn-cob pipe needs no chemical coddling. It is able to stand on its own stem, and to puff into the hall of fame under its own power. It is as distinctively impressive as the Missouri mule.

**THE RADIO** industry now employs 200,000 workers, and daily sales of apparatus amount to a million dollars. And it may be—

## WHEN WAXED ENDS WERE WOEFUL



In nominating Caesar A. Flint for county treasurer, that gentleman's friends believed they were choosing an invincible candidate.

His record was clean; his honesty never had been impugned, even when the impugning was easy; he could write his name so that it was almost undecipherable, and in other ways he seemed to be eminently qualified for the high office to which he aspired.

Unfortunately, however, he waxed his mustache and parted his whiskers. Could the proletariat warm up to a candidate who spent precious moments daily in training and caressing his facial dandelions? Not in a thousand years!

If Mr. Flint had used Colgate's Rapid-Shave Cream he would in all probability have escaped burial in the landslide that overwhelmed him when the free and untrammelled citizens of Adams County turned out to exercise their rights of suffrage.

## COLGATE'S

softens the beard at the base—

With hot water or cold, it makes shaving *easy* and quick, and it leaves the face cool, soothed and velvety.

Men who shave with Colgate's need no lotions to relieve smarting or disagreeable dryness of the skin.

Fill out and mail the attached coupon for a free trial tube of this wonderful cream—enough for 12 easier shaves than you have ever had.

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But imagine the havoc that would have been wrought to youthful footwear if you had been doing your sliding over a substance that placed ten, twenty or even fifty times as much friction between the ice and your foot.

Yet, that plain bearing shaft equipment of yours, by inviting friction in your plant today, is playing havoc with your production and your profits. Why not allow our engineers to estimate on an installation of Skayef Self-Aligning Ball Bearing hangers? They can prove that it costs more to keep plain bearing equipment than to replace it—that SKAYEF equipment will pay for itself in two years or less.

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Fit regular hanger frames of corresponding shaft size.

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### ANNOUNCE

THE OPENING OF AN OFFICE IN THE REICHSKREDIT-GESELLSCHAFT BUILDING, AT 53 FRANZOSISCHE STRASSE, BERLIN, GERMANY.

WITH MR. EDWARD A. KRACKE, C. P. A. (ILL.) AS RESIDENT PARTNER (TEMPORARILY), AND MR. ARTHUR M. LOVIBOND, C. P. A. (N. Y.) AS MANAGER.

NOVEMBER 1, 1924.

When writing to THE SKAYEF BALL BEARING COMPANY and HASKINS & SELLS please mention the Nation's Business

as Mr. Hoover told the third national radio conference in Washington—that radio has passed from the field of an adventure to that of a public utility. If so, another frontier is passed and romance may be jostled out of recognition by the bustling practicalities of the times.

Radio telephony has quickly won the popular ear—more quickly than any other scientific discovery, Mr. Hoover said. A year before he became Secretary of Commerce there were no broadcasting stations. Now there are 533 in operation. But in the industry's amazing power for growth lies the germ of its own destruction—"unless it has stringent rules of conduct to which all elements adhere it will die of its own confusion."

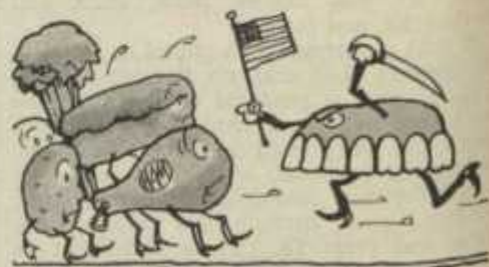
The conference was an experiment in industrial self-government. It focused the interests of the listeners, the broadcasters, the manufacturers, and the marine services for agreement on the course of the industry.

In the beginnings of the industry broadcasting was mostly sound and fury, signifying novelty. And the novelty achieved wonder easily. Variety of program would have seemed a prodigal excess. But conquest of the ear may become harder than conquest of the air. To Mr. Hoover's way of thinking, local material available for local programs is not enough to sustain interest. And as goes the interest, so goes the industry.

This young utility that was once a younger adventurer must come to better organization of its interconnection facilities, Mr. Hoover believes—perhaps "a service similar to that which the newspapers have . . . in the press associations." Significant, too, is his belief that there is no practical method of payment from the receivers of programs.

Interest in the day's news is universal, whether it comes through the eye or the ear. If the Government can help in the development of broadcasting, well and good. But government monopoly of the transmission of radio programs and news matter would be no happier a solution of present problems of the industry than private monopoly. Monopolistic control of information by radio is still remote, but Mr. Hoover is alert to define its consequences. Even a deep interest in radio can not make his job a mere listening post.

THE UNITED STATES produces 80 per cent of the world's false teeth—hundreds of millions of them. So said William C.



Smith of Milford, Delaware, at the annual convention of the Dental Trades Association in Atlantic City. Synthetic incisors, bicusps and molars made in America masticate food in every country of the world.

Nations are inclined to put a bold face on a good many troublesome matters. Probably the brazen looks have been bolstered with American teeth. All this talk about the need for an international court simply shows the need for an international dental clinic. The world has been biting off more than it can chew—and poor mastication means poor di-



gestion. But it may be the proud boast of Americans that wherever the chewing is thickest, there—in the very front row, so to say—will be found tried and false teeth "made in the U. S. A."

**F**INNISH bookworms have turned up as stowaways in paper consigned to a New York company. The worms tunneled through a shipment of Finnish paper, and then bored into the staves which held a shipment of American paper. Blank paper is not likely to put foreign-born bookworms out of kelter with American ideals and institutions. But the American Paper and Pulp Association wants something done about the damage to the paper, and it has put the circumstances before government entomologists.

The Association fears, it says, "that the invasion, if not checked, will result in the importation of another foreign pest."

That old saw about the turning of the worm broke off too short. It doesn't lay any doubts. When do worms turn? And do they ever turn to the right?—and become good citizens? Or are they fit only for "treasons, stratagems and spoils?" And yet, a bookworm in a warehouse nook seems about as harmless as an angle worm on a fisher's hook.

**A**DVERTISEMENT is made of need for a pest exterminator in buildings of the State, War and Navy Departments in Washington. The duties of the job include "the skillful mixing and distributing of poisonous compounds, the use of poisonous gas, and the placing of traps."

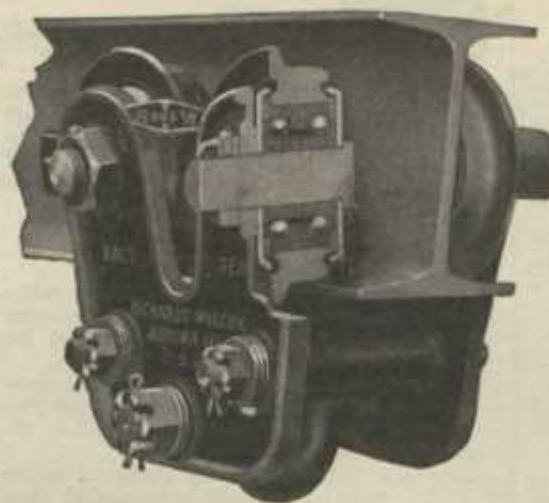
But why all that trouble? Any of the bulging bouncers who nightly sort the cheap from the Johns at stage doors could put out pests without the thimble rigging shadowed in the government job. And like as not, bouncers of the old school would scorn to trap a pest—they would exterminate him with their bare hands—a kind of art for art's sake.—R. C. W.

### The Return of Silver "Cart Wheels"

**B**ECAUSE the cost of replacing paper money is getting so high, the Federal Government is trying, according to the press, to get its citizens into the habit of carrying around silver dollars.

We have all heard of the plot hatched by the Treasury—slipping a careless cartwheel into each employee's pay envelope; a sort of cash and carry system. It seems "the Government has found that the maintenance of its paper circulation in good condition is costly. Replacing of worn paper is estimated to cost as high as 3 per cent of its face value. The replacement cost on silver is negligible." Well—but why should the citizen have to help the Government "save its face," so to speak? What about the "replacement cost" on trousers' pockets, and purses?

Lo, the poor citizen! This is only another instance of the folly of government ownership. The consumer always pays. If the Government owns the paper money and lets you hold it in your hand for awhile, you pay 3 per cent of its face value for the wear and tear it has suffered; while if you complain about that 3 per cent they take it out of you by giving you a nondestructible toy, replacement cost guaranteed negligible, which wears out not only your patience and strength in toting but also your purse or trousers' pocket, as the case may be, in toto. This should offer, to the truly logical mind, conclusive proof that government ownership is always a failure, whichever way you look at it.



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So confident are we of the ability of the **R-W No. 925 Trolley** to render superlative service that we will gladly send it to any reputable manufacturer for free trial. Such a trial involves no cost or obligation, for if the trolley fails to demonstrate its superiorities under actual working conditions you have only to send it back at our expense. This offer, we believe, is far stronger than any claims we can make.



## Ball-Bearing I-Beam Trolley

is the outcome of years of endeavor to overcome **every** fault common to **I-beam** trolleys. Rigid tests over a long period of time have convincingly demonstrated that the **R-W No. 925 Trolley** is the most durable, most useful and most easily operated trolley obtainable. Among its many exclusive features are bumpers which protect wheels from chipping; an exceptionally short wheel base, permitting easy operation on curves; bearings protected from gritty dust by felt washers; crowned wheel treads, which reduce friction, and combination radial and thrust ball bearings. The **R-W No. 925 Trolley** is made in seven capacities— $\frac{1}{4}$  ton to 4 tons. Write today for Catalog P-23 and further details of free trial offer.

### A Few of the Many Satisfied Users

American Magnesium Corp.  
Ningens Falls, N. Y.  
American Radiator Co.  
12th and Eastern Aves.  
Kansas City, Mo.  
American Radiator Co.  
Buffalo, N. Y.  
American Thread Co.  
New York City  
Arizona Iron Works  
Phoenix, Ariz.  
Baker Machinery Co.  
Des Moines, Iowa  
Bellamy Co., Inc.  
Boston, Mass.  
Berry Iron & Steel Co.  
St. Joseph, Mo.  
Brooklyn Union Gas Co.  
Meter Repair Dept.  
Brooklyn, N. Y.  
Burnham Boiler Corp.  
Lancaster, Pa.  
Campbell, Wray & Cannon Foundry Co., Muskegon, Mich.  
Central Foundry Co.  
Marshalltown, Iowa  
Challenge Co.  
Batavia, Ill.  
Commissioners, Sevier County  
Purmanth, O.  
Cordway Tire Co.  
Grand Rapids, Mich.  
Champion Valve Mfg. Co.  
Oak St. Springfield, Mass.  
Z. T. Darrow  
Cassandria, N. Y.  
The Elliott Co., 143 Albany St., Cambridge, Mass.  
Fairbanks, Morse & Co.  
Beloit, Wis.  
Fairport Oil Co.  
Fairport, N. Y.  
Fleishman Yeast Co.  
New York City  
Form Foundry & Mfg. Co.  
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Frank Foundries Corp.  
Moline, Ill.  
Gold Seal Gas & Motor Co.  
Rush, N. Y.  
Grand Haven Brass Co.  
Grand Haven, Mich.  
Holland Laundry Co.  
Brooklyn, N. Y.  
S. M. Howe Co., 510 Midland St., Charleston, Mass.  
Independent School, District of Virginia, Virginia, Minn.  
Jamestown Table Co., Jamestown, N. Y.  
Kehler Co.  
Kehler, Wis.  
Lanning & Falts  
Herkimer, N. Y.  
Nebraska Buick Auto Co.  
Lincoln, Neb.  
Newbury Mfg. Co.  
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Patterson Steel Co.  
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Perkins Builders' Supply and Fuel Co., Des Moines, Iowa  
Pittsburgh Plate Glass Co., Works No. 6, Charleroi, Pa.  
Powerton Tire Co., Rochester, N. Y.  
T. B. Ray Co., 225-246 Congress St., W., Detroit, Mich.  
The Ricker Mfg. Co., 250 N. Water St., Rochester, N. Y.  
The Ben Sittitt Iron & Fibre Co., Winthia, Kans.  
The Studebaker Corp., South Bend, Indiana  
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United States Radiator Corp., Edwardsville, Ill.  
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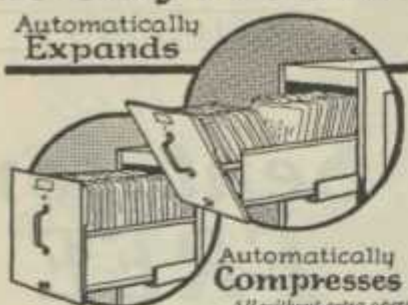
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EXPANDING  
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A  
quiet tip  
for a yuletide  
gift

ANY ONE who uses the telephone will be delighted with a Whisper-it telephone Mouthpiece as a Yuletide gift. It brings such luxurious comfort and ease in telephoning, in addition to making every conversation absolutely private.

The Whisper-it is sanitary. It's easy to keep its highly polished glass glistening and sterile. And the Whisper-it is so easily applied—just screws on in place of the mouthpiece already on the telephone.

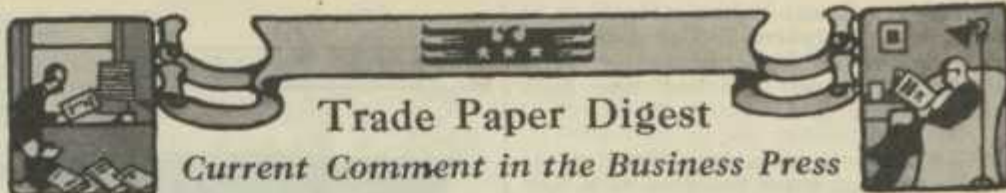
Only a dollar each. Money back if not satisfied. Give Christmas presents guaranteed to please.

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MOUTHPIECE  
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## Trade Paper Digest

Current Comment in the Business Press

ONE WONDERS how many people know that the Constitution of the United States has a new amendment in the offing—the 20th, and that its substance is as follows:

"The Congress shall have power to limit and regulate and prohibit the labor of persons under eighteen years of age."

It remains only for 36 of the states to ratify in order to make the measure law. In other words, the amendment awaits the will of the people.

Following are two comments on this proposal—one for and one against—which may provide some data from which to formulate individual opinion:

American Lumberman calls attention to the fact that "most states have supplemented their school laws with statutes restricting the employment of children of school age in offices, factories and mines." Add to this the regulation "in most of the states" that children from 6 to 14 years must go to school from 9 to 3 or 4 every day, and, the journal concludes, "there can be no valid reason for investing Congress with the control of 'persons under 18 years of age,' judging such power an infringement of states rights. 'Congress can give the people nothing with this amendment that citizens can not get for themselves without the aid of Congress . . .'"

Quoting from Scribner's, the Highway Builder presents a view representative of the other attitude: "There has been an undeniable increase in the number of children prematurely employed . . . States desiring to protect their children from this evil find their efforts nullified by the competition of other states having low standards. It is evident that what is needed is a national remedy to deal with this national problem. Under the present interpretation of the Constitution by the United States Supreme Court, the regulation of child labor is a matter for state control and the hands of Congress are tied. Therefore, further Congressional action is futile until the Constitution has been amended."

As the third party, who thinks it isn't a case of having to choose between two evils, Shoe and Leather Reporter has this to say: "No one in his right mind is in favor of child labor in industry, but it does not follow that any piece of attempted legislation is sound because it masquerades under an almost holy name."

What we need is to hear from the fourth estate with some sound proposal which will satisfy everybody.

### Farmers Banking, Not Buying: Will Boost Trade Next Year

FARM Implement News has received reports from dealers indicating "an increase in sales of seasonable equipment as a result of the advance in farm products and the consequent improvement in the position of the farmer."

Automobile Topics reports that "farmers are not excited over the prospect of one good crop and prices, and are not inclined to spend the money from the present one until assured that the next will be a profit-making one for them."

Electrical World is reassured about the status of the farmer in the Middle West because of "the September sales report of one of Chicago's large mail-order houses, which gives an increase of 36.12 per cent over the same period in 1923 . . ."

The Review of Reviews states that "bank deposits in Iowa increased \$22,000,000 in a few weeks of midsummer."

The Annalist reports that "gains are especially noticeable in agricultural sections," but "results generally would be better if there were normal

buying to cover future needs. The disinclination to purchase ahead restricts production. . . . Purchasing power is not the same as willingness to purchase. . . . There is a very large body of persons . . . who persist in saving a portion of their purchasing power by putting it into banks, insurance policies and other securities." But the journal offers the opinion that "the full results of this increased farm income will not be apparent until well into next year."

Perhaps a little effort, however, would ensure the desired results. Mr. Edwin T. Meredith, one time Secretary of Agriculture, observes that "of the six and one-half million farms in the United States, 644,000 of these farm houses have running water, and that is only 10 per cent. There are nine times as many yet to serve."

"There are 453,000 that have gas or electricity in their houses. That is only 7 per cent. There are 93 per cent yet as a market."

"There are 132,000 motor trucks and 229,000 tractors—2 per cent and 3 per cent. There is fifty times as big a market as has yet been served. There is the market for carpets, pianos, clothing and other things." One might add—books and magazines.

### Do Wage Reductions Impair Buying Power, Hence Trade?

FROM India Rubber Review come three significant items:

The report that "tire manufacturers, during the past six weeks, have taken on about 20 per cent more employees due to the increased demand for tires."

A statement of the National Industrial Conference Board to the effect that "one of the peculiarities of the present industrial depression is the marked resistance of wage rates to the general downward trend of manufacturing activities which has been in effect for the past year. Some of the reasons for the present stability are:

1. Constant hope that on account of the fundamentally sound basic conditions, the depression will prove to be of only temporary duration.
2. The desire to maintain the present general level of prices.
3. The existence of labor contracts with a duration of one to two years.
4. The feeling that wage reductions would impair general purchasing power."

And, third, from a study by the Standard Daily Trade Service of New York, the finding "that labor lost about one-third of a billion dollars between April and July due to unemployment" (being a confirmation of the Conference Board's "feeling" about wage reductions mentioned above under point four).

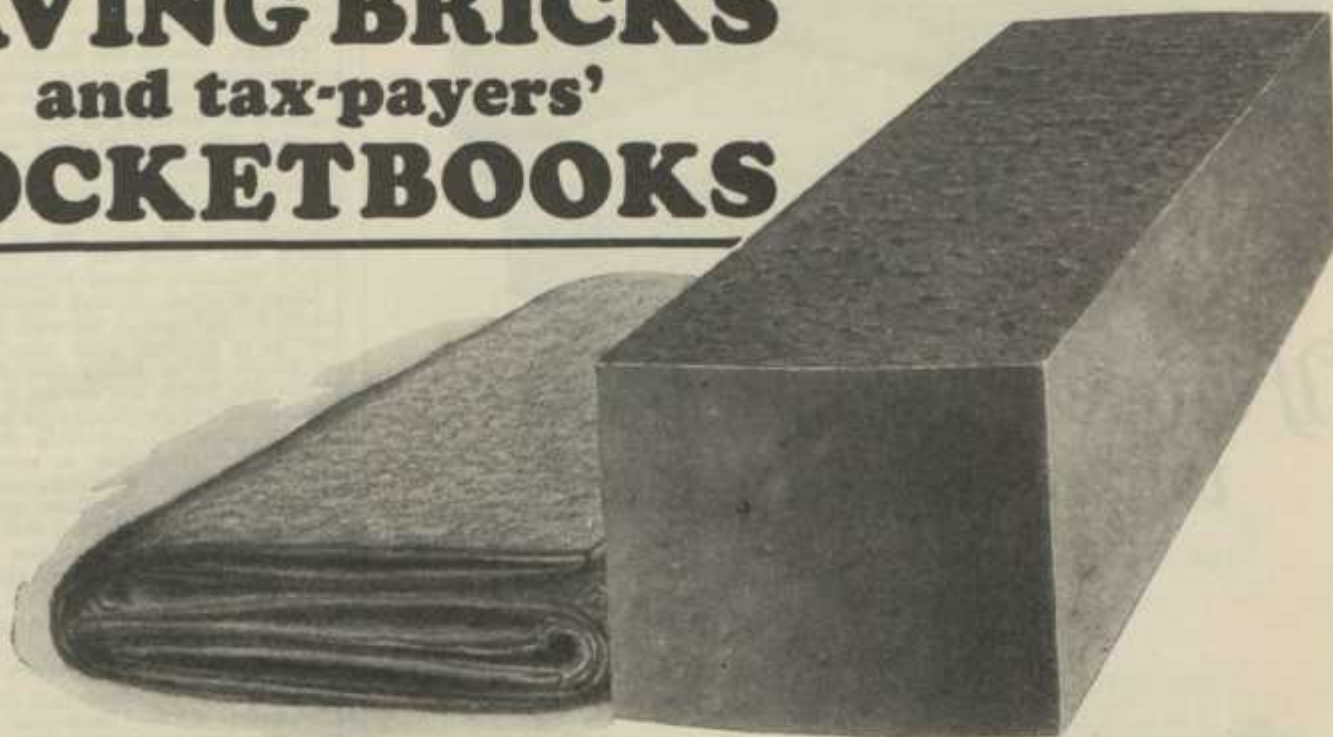
While, according to Commerce and Finance, the "Federal, New York State and Illinois labor departments are in general agreement that September saw a moderate improvement in the industrial employment situation, the problem is still serious and worthy of study by those dealers who are wondering why people don't buy."

### Way Out for Automobiles Thro' Combined Improvements

THAT the automobile public is awaiting the advent of a car which will offer not one or two or three of the accepted improvements, but all of them, is the belief of Automotive Industries. "Engines will continue to be improved," says the paper, "but other parts of the chassis as well as the body are capable of equal if not greater and perhaps more important improvement." A list is offered—not intended to be



# PAVING BRICKS and tax-payers' POCKETBOOKS



**I**F YOUR town, county and state will consistently pave with vitrified brick, it will lighten the strain on your pocketbook and your company's pocketbook for many years to come.

A properly-designed, well-built vitrified brick pavement can be counted on for a quarter-century or more of service at a minimum of repair and upkeep cost. Many communities are enjoying brick pavements laid thirty and thirty-five years ago and look forward to getting fifty years of service before they need replacement!

Profit by the experience, for instance, of Bucyrus, O., where Walnut Street, a main traffic route, is still paved with the brick originally laid in 1891, 33 years

ago, and relaid in 1922, *other side up*, for another generation of service. Or of Clinton, Iowa, which has yet to need a major repair for brick-paved Seventh Avenue, between 2nd and 5th Streets, laid 32 years ago.

Do you know of any other pavement at a comparable cost which can hope to equal these records? Is there a pavement, *other than brick*, in your locality which can show any such record?

Advocate vitrified brick pavements to your neighbors and business associates and help keep your taxes down. Show them the value of insisting on the *pavement that outlasts the bonds*.

*Actual comparative installation and upkeep figures, taken from public records and suitable for convincing your neighbors and associates of the value of vitrified brick, gladly forwarded on request.*

NATIONAL PAVING BRICK MANUFACTURERS ASSOCIATION  
ENGINEERS BUILDING CLEVELAND, OHIO

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### OUTLAST THE BONDS





*If it goes astray  
where is your security?*

NO ONE can guarantee the safe arrival of your parcel post package. But—prompt financial reimbursement is guaranteed in case of loss if you enclose a coupon from the North America's Insurance Coupon Book in every package.

No red tape delays—the coupon stub is the only shipping record required.

Call up today for details about our rates for Parcel Post Insurance.



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PHILADELPHIA

"The Oldest American Fire and Marine Insurance Company"

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Wants information on Parcel Post Insurance

exhaustive—of possible improvements, such as transmission requiring no gear shifting, long-wearing and noiseless brakes, adjustable seat-backs, finish equal to the life of the car, freedom from vibration, centralized lubrication, etc.

"Perhaps," queries the journal, "the first impression obtained from the foregoing list will be that most of the items are too far in the future to be deserving of immediate study, but a more careful consideration will show that individually most of them are incorporated in the design of some car which now is in production either in this country or in Europe, while practically all the others are in use on experimental cars, which can be seen by anyone with a legitimate interest in them."

Alloys of aluminum and magnesium are suggested, for lightness of material; a hint is given that, as to engines, "some large manufacturers are known to be keenly interested in certain unorthodox designs and are not unlikely to have a novel and well-developed type to 'spring' when the time is ripe"; something should be done to guarantee satisfaction in water-cooling systems; brake drums have been substantially improved; balloon tires will be universally used; some body interiors are more easily cleaned than others; "details such as means for excluding water" add much to the desirability of a car.

## Funny Facts from Canada: Ice Imports, Lost Rum, Duty Cut

FIGURES of Canadian trade for the first five months of the fiscal year present some curious facts," says *Commerce and Finance*. "Canada imported ice from the United States to the amount of \$16,000. She exported to us alcoholic beverages to the tune of \$4,314,000, which do not appear on our own tabulations of imports; these figures are more than double those of two years ago. Imports of farm implements fell off to half last year's figures instead of increasing since the duty was cut. Trade with France decreased since a trade treaty with that country was negotiated, and increased with the States."

There seems to be no exclamation adequate to meet the statement that Canada buys ice of us! Fancy that!

As to the disappearing "alcoholic beverages," what can have become of them? This is probably one of those prohibition jokes.

The result of cutting duties on their imports is a really serious matter—might the same happen, in the United States, if duties on imports were cut here? If so, why worry over the "dumping" of European products?

And, as to that last trick, what about our making a trade treaty right away with Russia?

## Market Control: Whose Job— Farmers? Banks? Yours? Mine?

THE FARMERS are holding the spotlight position just now, both because of their recent good fortune in the matter of wheat price increases and because, in spite of present sectional prosperity, our "farm problem" has yet to be solved. *The Price Current-Grain Reporter* points out that "the continuance of agricultural prosperity depends upon more definitely hitching up evenly distributed, fair-priced crops with the prices of manufactured articles offered the farm."

Mr. Edwin T. Meredith, in the *American Bankers Association Journal*, gets out of patience with the statement that "the situation will adjust itself." He asks "How? By bankruptcies in the city; by banks failing; by business houses failing, and so on. And then when 'the situation has adjusted itself' and the farmer is prosperous, we will go through a few more years and then repeat the operation again. Why not look the situation in the face and see what can be done to prevent these recurring periods of depression?"

Mr. Meredith, solidly opposed to guarantees and subsidies, thinks there is a way out, namely, "to interpret to this farmer the law of supply and demand. He must live in accordance with it. If we want 600,000,000 bushels of wheat, and we are only going to give 50 cents a bushel for it,

The good Painter  
uses

a  
good  
brush.

Because  
he is wise,  
as well as good,  
he selects

## WHITING-ADAMS BRUSHES

Good painters know through experience that the "goodness" of the job is determined by the goodness of the brush.

START WITH A  
WHITING-ADAMS BRUSH  
AND BE SURE OF A  
GOOD FINISH

JOHN L. WHITING-J. J. ADAMS CO.  
BOSTON, U. S. A.  
Brush Manufacturers for Over 116  
Years and the Largest in the World

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business executives like your-  
self are reading this number  
of the NATION'S BUSINESS.

Have you something to sell  
to this audience?

Let our advertising depart-  
ment furnish you facts and  
figures.

The NATION'S BUSINESS  
Washington



let us tell him so in advance. It is not morally honest for us to eat wheat at half or two-thirds of what it has actually cost the farmer and in that way keep his children out of school and prevent him from having an American standard of living. Outside entirely of whether it is morally honest, it is not enlightened selfishness. When this farmer goes broke and cannot buy . . . all the way down the line there is a let-up, and the factories close down." As to whose job it is, Mr. Meredith has this to say: "Banks and those they can call together should say, 'This is a duty, this is an obligation, this is a thing we will do in the interests of our business, in the interests of our communities, in the interests of our nation,' and really devote themselves to putting agriculture upon a business basis. It is your salvation. If you do not, you may expect to go through again what you have so recently experienced. . . . I am sold 1,000 per cent on the proposition that what affects the farmer affects business . . . then labor is out, and we have bank failures, and so on down the line."

### Whether Pippins or Profits, Gravitation Can Be Directed

THERE is "no argument respecting supply and demand and their effect upon prices," avers *The Iron Age*. "It is a great natural law, akin to the law of gravitation, that when supply increases more than demand prices fall, and vice versa." And for illustration—"The prices for wheat and corn last year were rather low; this year they have become rather high."

But *Wallaces' Farmer*, though conceding that "everyone knows that the law of supply and demand holds sway in the economic world with almost as much certainty as the law of gravitation in the physical world," nevertheless finds supply amenable to persuasion and demand a fickle lady. ". . . there are many types of machines for utilizing both laws. Big corporations with cost accounting systems and tacit understandings influence supply, demand and the price in a totally different way than millions of debt-burdened farmers freely competing." The journal wistfully wonders how long it is going to be before the farmer and his brother farmer will get together to do their own controlling where it has been demonstrated that controlling can be done.

### Joint Unemployment Insurance Widely Used and Working Well

UNEMPLOYMENT insurance is quietly being adopted in many industries. The men's clothing industry of Chicago has a fund which "now amounts to 3 per cent of the total payroll," according to *Printers' Ink*, "and is maintained by equal contributions from the workers and the employers. When and if there is any unemployment 40 per cent of the workers' wages are paid up to five weeks."

Recently such an agreement was inaugurated in New York, and involves employers and employees to the number of 200,000. This joint contribution is vastly better, thinks the journal, than the doleful doles of older lands.

The railways seem to appreciate the importance of this development in industrial relations. "Uncertainty of employment," says *Railway Age*, "is probably the greatest enemy of cooperation between employes and management. . . . If capitalistic industry were made as attractive for the worker as it would be by the solution of the unemployment problem, there would be little to unemployment from the growth of radicalism. Political dissension does not thrive on general economic security and well-being."

And *Railway Review* reports the appointment by the Association of Railway Executives of a committee to study stabilization of railway employment. "The problem . . . is to avoid, as far as practicable, the reduction of forces and of purchases in dull times." The magazine adds that "the motive is not as unselfish as it might appear to be. For the close margin on which the railroads are operating in these days makes it more and more imperative to maintain a skilled,

# What Does Your Advertising Do?

Getting the goods sold is the object of advertising. Not just letting people know that the goods exist, but doing something to send them on their way from manufacturer to consumer.

The president of a company manufacturing a widely-distributed cleansing preparation says in a recent letter:

"The Christian Science Monitor is working wonders for us in many of the large cities in establishing our product with the retail trade, and we feel that our advertising in it is the most resultful that we have ever enjoyed in any publication."

More than 9,000 retail advertising accounts are today on the books of the Monitor. These accounts are located in 400 cities of the United States, Canada and other countries. Our files contain many letters from manufacturers saying that Monitor advertising helps to move their goods off the dealer's shelves—having already helped to put them on those shelves.

Would you like to know how and why the Monitor gives these results? Information, specific instances, circulation details, will gladly be supplied by any of the following offices:

Boston, 107 Falmouth St.  
London, 2 Adelphi Terrace  
Cleveland, 1658 Union Trust Bldg.  
Kansas City, 705 Commerce Bldg.  
Los Angeles, 620 Van Nuys Bldg.

New York, 270 Madison Ave.  
Chicago, 1458 McCormick Bldg.  
Detroit, 455 Book Bldg.  
San Francisco, 625 Market St.  
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## The Christian Science Monitor

AN INTERNATIONAL DAILY NEWSPAPER

MEMBER A. B. C.



# What they want . . . . through coupons



With the coupons of well chosen bonds they can do what they most wish—purchase something they really want, or deposit them in the bank. A coupon from a high grade bond is itself an object lesson in the results of thrift and sound investment.

## THE NATIONAL CITY COMPANY

National City Bank Building, New York

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### ATLAS CALCULATING SERVICE

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CHICAGO

loyal and permanent working force; and such a force cannot be maintained under a system of more or less casual employment." And further—"the new committee may be expected to return some tangible suggestions in regard to unanimity of policies; and . . . it will solicit at once the suggestions and assistance of the Interstate Commerce Commission."

## Reno Beaten: Yucatan Makes New High for Civilization

RECENTLY "an investigating body of Americans returned from a tour with cheerful pictures of conditions as they saw them" in Mexico, says *Engineering and Mining Journal-Press*. "Some of our correspondents, however, are not so cheerful, and not at all sure of progress. They state that visitors to the principal cities see things running along with apparent smoothness and calmness, but that in the country it is another story. They say that the lower-class Mexican has imbibed the theory which denies the right of holding property, and that many difficulties ensue as a result."

Yucatan, a state in Southern Mexico, "the government of which is radical, is making a reputation as the champion quick-divorce locality of the world. If that isn't civilization, what is?" queries the journal. But perhaps the "body of Americans" did not penetrate into the wilds of Yucatan.

## A Question for Politicians: Who Owns the Isle of Pines?

THE SENATE may be asked during the coming winter to consider for ratification a treaty called the "Isle of Pines Treaty." This document, says *The Pan-American Union*, was "executed in Washington on March 2, 1904, by John Hay, Secretary of State, and Gonzalo de Quesada, Cuban Minister. . . ." It "relinquishes in favor of the Republic of Cuba all claim of title to the Island of Pines . . . in consideration of the grants of coaling and naval stations in the Island of Cuba. . . ."

So far as commercial interest is concerned, the products of this dot of territory are "grapefruit which finds a good sale in northern markets . . . winter peppers and egg-plants and

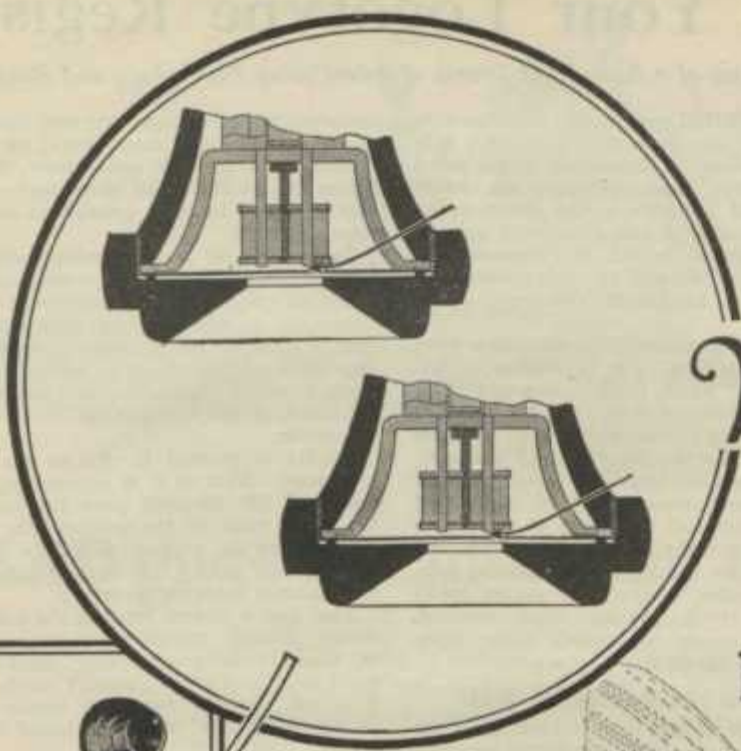


. . . oranges," and there is "some business in hardwoods, some in marble, and a little in pine lumber." Aside from the grapefruit industry, however, all these are really negligible in extent.

There are two possible entrances to the Gulf of Mexico, only one of which—that between Havana and Florida—is guarded (by the naval station at Key West). The other lies between Cuba and Yucatan. The Isle of Pines, like a ball in the socket of Cuba, offers a defense base for this passage. If Cuba's mainland can provide such a base, however, the island has no special value to the United States. Legal ownership of the spot is undetermined. "De facto it is under Cuban jurisdiction though outside the constitutional boundaries of Cuba."

The real issue, concludes the magazine, is "not whether or not Cuba owns it, but whether or not an area like this is worth the creation of international friction."





*Which space  
is bigger?*

by the thickness  
of a bee's wings

THE picture shows the ends of two telephone receiver magnets. The spaces indicated by the black arrows are equal in size—to the unaided eye.

But the extremely fine measuring instruments which Western Electric uses, show one space to be wider than the other by the thickness of a bee's wings. Even so small a difference is too great to pass the rigid inspection which watches over the making of your telephone.

This care for detail is one reason why your telephone is so dependable. It is typical of the whole work of producing Western Electric equipment, and is a manufacturing habit which dates back to the very beginning of telephone history.



Under the receiver cap is a thin disc of iron. For proper voice reception, the distance between disc and magnet must be fixed with minute accuracy. The operative shown here, by grinding the magnet unit, makes this distance just right.

# Western Electric

SINCE 1869 MAKERS OF ELECTRICAL EQUIPMENT





**ECONOMICAL  
LABOR  
5 RAILROADS  
2 INTERUR-  
BANS  
LOW POWER  
RATE  
IDEAL HOUS-  
ING  
BUILDINGS  
and SITES  
AVAILABLE**

### Economical Labor

**M**ARION'S largest industry has had no shut-downs or slack periods in 40 years. Employees, young and old, realize that steady work and reasonable pay means more—year in and year out.

Perhaps your special requirement can be met in Marion. Write for our Booklet or may we prepare a special survey for you?

**The Chamber of Commerce  
MARION, OHIO.**

## All-Expense Personally Conducted Wonder Tour of Mexico!

(Mexican Government Co-operating)

Leave Chicago and St. Louis

January 5, 1925

A special train of modern Pullman cars with standard sleeper, drawing room, compartment, club and observation accommodations, and dining car service, will depart from Chicago and St. Louis, January 5, 1925, with connections from Memphis, for an extraordinary tour of Mexico, a three weeks' trip, visiting points of commercial and tourist interest.

In Mexico the party will be under the guidance of Mexican and American Railway representatives.

Similar tours will be operated on February 2 and March 2, 1925.

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T. & P.—L. G. N.—NAT'L RYS. OF MEX.

Via



**MISSOURI  
PACIFIC**

# Does Your Logotype Register?

*The Review of a Book That Treats of Advertising Psychology and Response*

**A**N INTERESTING and unusual experiment in psychology was made in Philadelphia high schools to determine the dominance of the brand names of eighteen commodities in the minds of 500 boys and 500 girls in the eleven senior classes. The results of the experiment are reported and analyzed by H. M. Donovan, assisted by George Mitchell in "Advertising Response" (J. B. Lippincott Company, Philadelphia.)

To make the experiment a questionnaire form was used, suggested by "The Leadership of Advertising Brands," by G. B. Hotchkiss and R. B. Franken. The question sheet included a list of commodities sold in Philadelphia stores. A space was provided under the name of each commodity. In that space the pupil was asked to write the manufacturer's name or brand name that first came to mind, and the choice of names was to be made on no other basis.

The commodities included bread, butter, cake, candy, cigars, coffee, crackers, ice cream, men's clothing, milk (fresh), mince meat, mustard, pianos, razors, sugars, tea, tooth paste, typewriters, and also banks and newspapers.

### The Abou-ben-Adhem of Ads

**T**ABULATION of the votes according to the mental dominance of the eighteen commodities of banks and of newspapers, shows Franklin sugar in first place with 847 votes, or 84.7 per cent of the total number—in other words, when the thousand pupils thought of sugar, 847 of them thought of Franklin sugar first. Next ranks National Biscuit Company's crackers with 717 votes, or 71.7 per cent. And so on down the list: Underwood typewriters, 673, 67.3 per cent; Kolb's bread, 632, 63.2 per cent; Golden's mustard, 603, 60.3 per cent; The Philadelphia Bulletin, 602, 60.2 per cent; Gillette razors, 599, 59.9 per cent; American Stores butter, 567, 56.7 per cent; Colgate's tooth paste, 557, 55.7 per cent; Breyer's ice cream, 536, 53.6 per cent; Supplee's fresh milk, 455, 45.5 per cent; Tasty-kake, 441, 44.1 per cent; Whitman's candy, 314, 31.4 per cent; Cunningham pianos, 307, 30.7 per cent; Eisenlohr's cigars, 292, 29.2 per cent; Tetley's tea, 261, 26.1 per cent; American Stores coffee, 248, 24.8 per cent; Atmore's mince meat, 135, 13.5 per cent; Kirschbaum clothing, 103, 10.3 per cent; and the First National Bank, 100, 10.0 per cent.

Outstanding among the findings of the authors are: That advertising was the predominating force which controlled the association of the brand names and the commodities in the minds of the pupils; similarity of the votes of the boys and of the girls, and similarity of the votes of the several schools, which were located in different parts of the city; the importance of establishing trade names in the minds of young men and of young women; and that newspaper advertising is the greatest force for influencing brand familiarity.

In general, the authors believe, the advertising of any product has the best chance of being completely successful if it is the first in the field of its product; if it is continuous; if it makes use of large space; if it is frequent; if it is recent; if it appears in leading local newspapers and important national publications; if it includes sufficient use of secondary advertising mediums.

The advertising of the brands dominant in the minds of the pupils was measured against characteristics specified for successful advertising, and the measure of fulfillment is expressed in percentage. The advertising of the dominant brands, according to the ratings of the authors, achieved 98 per cent for recency; for continuity, 87 per cent; for use of large space, 72 per cent; for frequency, 65 per cent; for primacy, 55 per cent.

Appraising the advertising of commodities without dominant brands, the authors charge a lack of effective publicity. Usually, they explain,

the advertising has begun too late, has been spasmodic, has used too small space, has run in an insufficient number of publications, has stopped before the product had dominance—or that it was weakened by some coincidence of the handicaps indicated.

To provide for a clear understanding of their analyses, the authors are at considerable pains to define the purpose and possibilities of advertising. Obviously, an advertisement must attract attention if it is to be effective—it must make an impression on the memory, and one test of its effectiveness is whether or not the manufacturer's name or the brand name is remembered by the reader.

Quality of product is vital to the success of a business. Next to it in importance, Mr. Donovan and Mr. Mitchell place the popularity of the brand name of the product—the name that distinguishes the product should be so well and so favorably known that every retailer is forced by consumer demand to carry it.

That goal is seldom reached, the authors think, except through extensive advertising. Because of extensive advertising, they point out, every retail druggist carries Colgate's tooth paste, but it is not necessary for every grocer to include in his stock any particular brand of package coffee.

But if the question be raised whether the results of the tests on the students in Philadelphia schools can be regarded as a criterion for the whole country, the authors are ready with answer. They are convinced that had similar tests been made in Chicago, San Francisco or Oshkosh, the general laws of advertising response, in principle, would have affected the replies of the pupils in exactly the same manner as they did in the Philadelphia experiment. In support of their belief they cite the results of their own test—the voting of each school was almost an exact index of the voting of every other school, and of the combined voting of all schools. To their way of thinking

Human nature is so uniform that whatever is found to be true of a representative portion of the people in any community will be true for a similar portion anywhere else. Just as like results were obtained in Philadelphia schools with students from districts distinctly unlike, so would the average results in any city or town anywhere throughout the country be similar.

### Moral: Youth Must Be Served

**T**O MAKE the results of similar tests a basis of conclusion, the authors suggest that it is only necessary that the group tested shall have lived continuously in one community "because all have been subjected to the influence of the same newspaper advertising and other local advertising, as well as that contained in national publications. Also, because local buying habits have affected all to a like degree."

If there were a moral for advertisers who read the book, it might well be "He serves himself best who best serves youth"—that belief has frequent and varied expression. Responsiveness is greatest during the years from 17 to 30, the authors assert, and impressions fixed at 18 or 19 are lasting. Youth sets the fashion of the times—"not a book, a magazine, or a play can meet even with ordinary success unless it appeals to youth."

An impressive statistical structure might be erected on the fact that the relative number of votes for the leading brands of each commodity bears a close relation to the respective sales of those brands in Philadelphia stores.

Mr. Donovan and Mr. Mitchell have used words and figures to good purpose in telling the story of a workman-like attempt to get some much needed information on the effectiveness of advertising—and that appraisal is no less deserved because there may be exceptions to some of their conclusions.—R. C. W.





## LEAD gives to chinaware its beauty and lustre

**G**LAZED china is nothing more than clay shaped in various forms and covered with a thin skin of glaze. It is this thin coating that transforms the rough porous clay body into a beautiful, smooth, lustrous china plate or cup or saucer. And in making this glaze, lead has always been one of the most essential ingredients.

For twenty centuries pottery has been coated with lead glazes. Green pottery made in China during the Han dynasty (206 B. C. to 220 A.D.) bore a lead glaze, as did the pottery of the ancient Assyrians and Egyptians. For hundreds of years Europe and every country influenced by European civilization have used pottery made of common clay covered with lead glazes.

Today many thousands of pounds of lead are used every year in making both transparent lead glazes for fine chinaware and brilliant, glossy opaque enamel glazes put on sanitary bathroom fixtures, swimming pool, bathroom and kitchen tile and ornamental tile.

Any one of the three lead products, white-lead, red-lead or litharge, can be used in making lead glazes. Makers of fine chinaware will use, as does one manufacturer, as much as 80,000 pounds of white-lead a year and only 1,000 pounds of red-lead. Others in the industry use large quantities of red-lead. They will reverse the above figures and use many times as much red-lead as white-lead.

### *The use of lead paint*

**A**LTHOUGH lead in pottery is constantly serving and helping to beautify your home, the

tonnage of lead used in this way is not so great as that used in paint. Everywhere you go you see *white-lead paint* protecting houses from the attacks of weather. Approximately 350,000,000 pounds of white-lead are used on wooden and other non-metallic surfaces each year. *Red-lead paint* prevents rust from eating into and destroying iron and steel.

Many who never before seriously considered the truth of the maxim, "Save the surface and you save all," are now using white-lead and red-lead to protect their investments.

"Save the surface and you save all" - *Lead's Lead*

### *Producers of lead products*

*Dutch Boy white-lead and Dutch Boy red-lead* are the names of the pure white-lead and red-lead made and sold by National Lead Company. On every keg is reproduced the picture of the Dutch Boy Painter shown below. This trademark guarantees a product of the highest quality.

Dutch Boy products also include linseed oil, flattening oil, babbitt metal and solder.

National Lead Company also makes lead products for practically every purpose to which lead can be put in art, industry and daily life. If you want information regarding any particular use of lead, write us.

If you wish to read further about this wonderful metal, we can tell you of some interesting books on the subject. The latest and probably most complete story of lead and its many uses is "Lead, the Precious Metal," published by Century Co., New York. Price, \$3.00. If you are unable to get it at your bookstore, write publisher or order from us.



### NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State St.; Buffalo, 119 Oak St.; Chicago, 909 West 18th St.; Cincinnati, 650 Freeman Ave.; Cleveland, 880 West Superior Ave.; St. Louis, 724 Chestnut St.; San Francisco, 443 California St.; Pittsburgh, National Lead & Oil Co. of Pa., 319 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



# Skinner Bros.

## Baetz Patent HEATING SYSTEM

Heating Equipment Built  
That Heats Your Plant  
Thoroughly

**U**NIFORM temperature, every hour of the day, on every floor, in every corner, all open spaces heated, none can escape no matter how cold it may be outside the plant when Skinner Heaters are used. There is the satisfaction in having heating equipment that is built for your requirements. Under such favorable conditions operators can do their best and biggest work and production is kept up, without stress, to its full capacity.

Performs with strict economy in every hour of operation



Skinner Bros Patented Direct Fired Heater—D-F. Type—where steam is not available.

Skinner Heaters are individual compact units, they heat and ventilate and can be adapted to practically any type of air conditioning service; constructed in the floor type and the inverted type for overhead suspension.

They are effective because of their scientific, simple construction. No outside pipes or ducts are used for air distribution. Fan operated by any power available. Use live or exhaust steam at high or low pressure. They are portable, require no special foundation, can be easily moved and relocated by common labor, ready for operation without delay. Completely assembled before shipment, most economical to operate and the maintenance cost is exceptionally low. Performance is positively guaranteed when installed as directed by our engineers.

Many hundreds of leading plants, of every type, in the United States and Canada, are users of Skinner Systems and they know what it means to heat best and cost less.

### Our Engineers Are at Your Service

Our trained staff of experts will advise, without obligation, with Executives, Engineers, Superintendents, Managers and Mill Men concerning the installation of heating, ventilating and air conditioning systems for buildings of every size and type. Satisfaction in every detail is the result of our work.

### Among the Prominent Concerns Who Use Skinner Systems Are:

Westinghouse Electric & Mfg. Co., New York & Pennsylvania Co., Hoosier Desk Co., American Stove Co., Roxana Petroleum Corporation, Krey Packing Co., International Shoe Co., General Electric Co., Ford Motor Co., Fairfield Paper Co., Maxwell Motors Corp., National Enameling and Stamping Works, Standard Steel Car Co., Certain-teed Products Corp., Commonwealth Steel Co., American Brake Co., Best Foundry Co., American Car & Foundry Co., Massillon Steel Casting Co., Federal Foundry.

## SKINNER BROS MANUFACTURING CO., INC.

Sole and exclusive manufacturers of

Skinner Bros Baetz Patent Heaters and Skinner Bros Patented Direct Fired Heaters

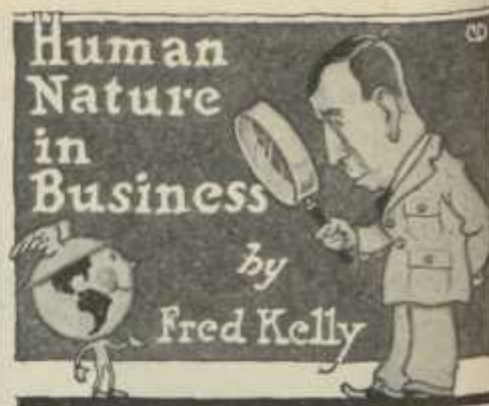
Home Office and Factories: 1430 S. Vandeventer Avenue, St. Louis, Mo.

Eastern Office and Factories: 120 Bayway, Elizabeth, N. J.

Sales Offices and Branches in All Principal Cities



Skinner Bros Baetz Patent Heater Steam Coil type S-C. uses live or exhaust steam at high or low pressure.



**I**SAT one evening listening to two fairly successful engineers, one of whom is now a business executive, discussing the present state of the engineering profession. They agreed that a competent engineer is likely to be found working for a plain business man who is not an engineer.

"I can hire a fairly good engineer," declared one, "for less money than I'm obliged to pay a first class stenographer. Of course such an engineer won't have much imagination or initiative, but he will do what he's told accurately and acceptably."

The other engineer remarked that he is sending his two boys to a college where they will get an old-fashioned cultural course—mostly Latin and Greek—largely for the purpose of diverting them from a line of study which might lead to a degree in engineering.

Both declared that an engineer will not ordinarily go far because he is too busy doing one routine thing which can easily be done by another younger engineer whenever he gets tired of it.

I was astonished that engineering could be held in such low esteem by those within the profession. Is the trouble that there are too many engineers? Certainly it isn't that they are lacking in fundamental intelligence. Army tests applied to officers during the World War showed that engineers were not only at the top in the intelligence scale, but 60 per cent ahead of medical officers at the bottom of the scale. I wish other business men and engineers would write and tell me their impressions of opportunities or lack of opportunities in engineering work at the present time.

**A**FAMILY of my acquaintance gave up their vacation trip last summer solely because they didn't know what to do with the cat. I wonder how many more there were in the United States who got no vacation on account of the cat or the dog. Presumably there were still more who were unwilling to entrust the care of the front lawn to somebody else. And there must be even more who dare not close up their big homes full of expensive rugs and silverware which might attract burglars. The point is that nearly everybody is hampered by possessions. We all own too many things over and above our actual needs. Yet on every hand we are besieged to buy more. We are constantly the victims of capable and highly organized salesmanship.

**E**VERY year I see new ways in which retail merchants cleverly play on mankind's snobbish instincts.

I recently accompanied a fastidious friend into a so-called exclusive Fifth Avenue tobacconist. The clerk, wearing a cutaway coat, met us at the door, and his manner was that of an ambassador's assistant. He was

## Who are our 165,000 Subscribers? They are executives in 96,813 Corporations\*

In these corporations the magazine is being read by the following major executives:

Presidents.....	41,435
Vice-Presidents.....	18,770
Secretaries.....	18,111
Treasurers.....	8,782
Partners and Proprietors.....	10,097
Directors, Chairmen of Boards, Comptrollers, General Counselors, Superintendents and Engineers.....	7,080
General Managers.....	13,061
Department Managers (Branch—Purchasing—Sales —Export, Etc.).....	12,350
Major Executives.....	129,686
Other Executives.....	9,823
Total Executives.....	139,509
All other Subscriptions.....	25,476

If this audience represents a market for your products, we shall be glad to give you complete advertising details.

**The NATION'S BUSINESS, Washington**

\*Figures based on a complete investigation of all subscribers in twelve cities.

When writing to SKINNER BROS MANUFACTURING CO., INC., please mention the Nation's Business



plainly anxious to get just that blend of tobacco that would exactly harmonize with my friend's temperament. He asked him questions about his smoking tastes and personal history.

I wondered to myself: "Is this fellow a tobacco clerk or a psychoanalyst?" Of course the idea was to impress the customer that he was in on something grand and much too important a person to smoke just any tobacco but must deal at a shop where they give heed to little niceties for persons of noble birth.

Some day I'm going to enter that shop and ask for a five cent plug of chewing tobacco just for the fun of seeing the clerk fall in a swoon.

**A**N EXECUTIVE I know bought a dictating machine and did his letters that way for a month, but then resumed having a stenographer.

"I found I expressed myself better to her than to a machine," he explained. "Having a pretty girl sitting there listening made me more anxious to express myself well, and also to do so without dilly-dallying. With the machine I could sit and stare at it and take too long deciding what to say."

**A** NEW YORK theatrical man told me recently that visitors from out of the city attend theatres there much less than is generally supposed.

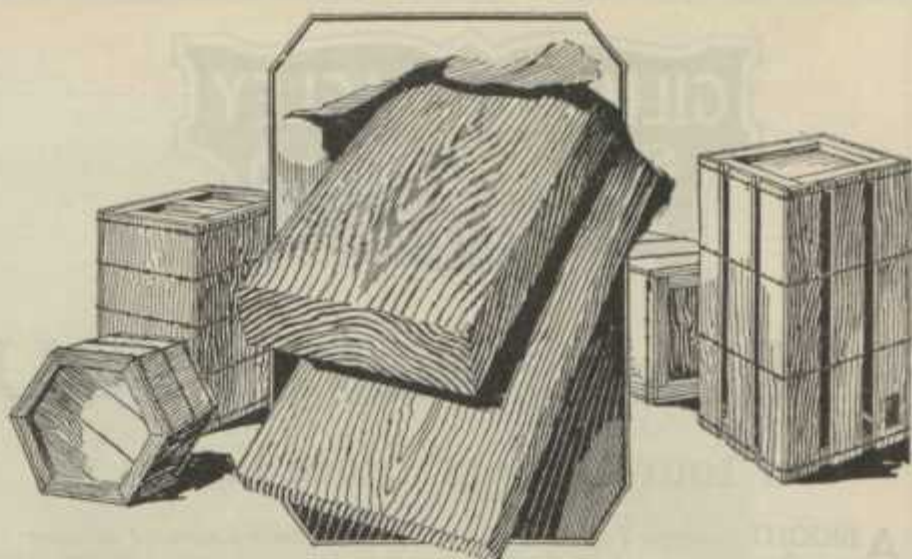
"What takes up most of visitors' time," he said, "is hunting up old friends from back home whom they haven't seen for many years. If a man left a little town out west and is reported to have done fairly well in New York, even those from his town who didn't know him very well are anxious to see him in his New York setting."

**W**HAT a lot of things in everyday affairs we must take on faith! Yesterday I ate mushrooms in a strange hotel. The only assurance I had that there were no toadstools in them was the fact that the hotel appeared to be a well-conducted place whose managers, doubtless, would take precautions against poisoning guests.

The milk and cream seemed good, and yet I know that many dairy barns are none too clean. I could only accept on faith that milk in this hotel was from a place where cows are treated as prima donnas.

When I buy bonds my willingness to accept on faith is placed to a much greater test. I don't know whether the corporation issuing the bonds is managed by honest men, whether they have a clear title to real estate given as security, or whether the lawyers who inquired into the legality of this bond issue are competent. All I can do is put my faith in the bank or bond house from whom I make my purchase and assume that they wouldn't sell me any security not first class. When a man tells me that he takes nothing on faith but always has to be shown, I know he is either a liar or a fool.

**T**ELEPHONE directories have largely taken the place of the larger old-fashioned city directories. Many cities have not had a new directory, except the telephone book, in years. Even when a regular directory is available, people use telephone books as more likely to be up to date. Nearly everybody of much importance in a city is likely to be listed as a telephone subscriber. Hotels and credit departments of big stores often have on file telephone books from practically every city



## What this difference in lumber thickness means

Compare the thicknesses of lumber used in the old fashioned nailed wood box and the Pioneer Wirebound Box—the strongest and lightest wood box made.

Thousands of manufacturers are now using this money saving, lumber saving, labor saving, time saving box. They pay for only  $\frac{1}{3}$  the lumber they formerly used.

Freight and express charges are less because of the great difference in box weight. Labor costs are reduced. It takes quite some time to build an ordinary box, but Pioneers are assembled in two minutes or less. There are fewer loss and damage claims with Pioneers because Pioneers are stronger and are sealed against petty theft.

We will gladly design a Pioneer Box or Crate to suit your products. Test it in any way. Prove to your own satisfaction that Pioneers can cut shipping costs for you as they have done for manufacturers in almost every industry. A brief note to us is all you have to do.

### A Few of the Products shipped in Pioneers

Aluminum Ware	Insulators
Automotive Products	Knit Goods
Batteries	Leather Goods
Bottles	Locks
Candy	Meat
Castings	Paint
Chairs	Paper
Chemicals	Radiators
Drugs	Screw Machine Products
Electrical Supplies	Spark Plugs
Enamel Ware	Tires
Furniture	Varnish
Hosiery	Wrenches

## GENERAL BOX COMPANY

504 N. Dearborn Street - Chicago, Illinois

Sixteen Factories Give You Close at Hand Service

Bogalusa, La.  
Brewton, Ala.  
Brooklyn, N.Y.  
Cincinnati, O.

Crawfordsville, Ind.  
Detroit, Mich.  
East St. Louis, Ill.  
Hattiesburg, Miss.

Houston, Tex.  
Illmo, Mo.  
Kansas City, Mo.  
Louisville, Ky.

Nashville, Tenn.  
New Orleans, La.  
Pheboyan, Wis.  
Winchendon, Mass.





## FREE Advertising for YOU on Your Dealers' Store Fronts

A BRIGHT, beaming Federal Electric Sign on your dealers' store fronts, telling everybody 24 hours a day to come in and buy your product—the most effective dealer tie-up you can get—constantly reminding prospects to buy your product, which they have seen advertised or heard about—NOW.

**Blaze your trademark** across the country in letters of fire!

### FEDERAL ELECTRIC COMPANY

Manufacturers' Sign Service Division

8750 South State Street, CHICAGO, ILL.



A FEDERAL ELECTRIC SIGN IS THE CAUSE OF A BUSY STORE—NOT THE RESULT

### FAMILY FINANCE

Home life is happier for everyone when worry is eliminated.

The Family Budget, developed through the cooperation of the whole family, eliminates unprofitable expenditures, increases savings, and banishes worry.

The protection of the family, the education of the children, assured independence for old age, can all be made possible through the Family Budget.

Those responsible for family welfare have always had these things at heart, but today are studying them with a deeper interest than ever, and the budget idea is getting recognition.

Make a trial of the JOHN HANCOCK FAMILY BUDGET AND ACCOUNT SHEET, which you may have for the asking, also additional sheets, as needed.

A month's trial will help you. A few months' trial will convince you that the Budget helps you to make the most of your income.

Address Publicity Department



Over Sixty Years in Business. Now insuring over Two Billion Dollars in policies on 3,500,000 lives.

The most marked advance in dealer merchandising—bringing in actual sales day and night—will make your 1925 sales campaign a bigger and more profitable one.

Our Manufacturers' Service Representatives have all the data and can explain the plan in a few moments. Write, wire or phone us today—it won't obligate you—you owe it to your Company to learn the facts—NOW.

Thousands of Titles at  
**1/2 Price**  
and less

**ANY BOOK IN PRINT**

Delivered at your door. We pay the postage. Standard authors, fine editions, new books, all at biggest savings. Be sure to send postcard for Clarkson's catalog.

**FREE** Write for our great book catalog. This catalog is a short course in literature and is so used by some of America's leading universities; 800,000 book lovers long for it. Free if you write now.

**DAVID B. CLARKSON BROKER**  
1217 CLARKSON BUILDING, CHICAGO, ILL.

**\$63,393 from One Letter!**

\$63,393.00 worth of merchandise sold with a single one-page "form" letter at a total cost of less than \$100.00. Send 25c. for a copy of **Postage Magazine** and an actual copy of this letter. If you sell, you need **Postage** which tells how to write Sales-Producing Letters, Folders, Booklets, Home Magazines. Subscription \$2 a year for 12 numbers full of selling ideas. "Anything that can be sold can be sold by mail."

POSTAGE—18 East 18 St. — NEW YORK, N. Y.

### HUMAN ENGINEERING

Railway Audit and Inspection Company, Inc.

Fourth and Chestnut Streets  
PHILADELPHIA

in the United States. Incidentally the sale of these directories has become a profitable side line to telephone companies.

BACK in my home town where real estate was comparatively cheap and show window space cost little, Horace Zell, who had a general store, used to crowd hundreds of articles into one small window. I've known him to exhibit lawn mowers, shoes, canned goods, neckwear, and manicure sets all heaped in together. But on Fifth Avenue where show window space is worth a fortune, I recently saw a large window containing nothing but a modish shirt and a pair of socks. I'm hoping now that some enterprising storekeeper will some day devote his most spacious window to the display of a single little bone collar button.

STATEMENT OF the Ownership, Management, Circulation, etc., required by the Act of Congress of August 24, 1912, of The Nation's Business, published monthly at Washington, D. C., for October, 1924.

City of Washington, District of Columbia, ss. Before me, a Notary Public, in and for the City and District aforesaid, personally appeared Merle Thorpe, who, having been duly sworn according to law, deposes and says that he is the Editor of The Nation's Business, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager, Publisher, Chamber of Commerce of the United States, Washington, D. C.; Editor, Merle Thorpe, Washington, D. C.; Managing Editor, J. W. Bishop, Washington, D. C.; Business Manager, J. B. Wyckoff, Washington, D. C.

2. That the owners are: Chamber of Commerce of the United States of America, said body being an incorporated organization under the laws of the District of Columbia, its activities being governed by a Board of Directors.

The officers and directors are as follows:

President, Richard F. Grant, Vice President, M. A. Hanna Co., Cleveland, Ohio; Vice Presidents, Lewis E. Pierson, Chairman of Board, Irving Bank-Columbia Trust Co., New York, N. Y.; John W. O'Leary, Vice President, Chicago Trust Co., Chicago, Ill.; Harry A. Rice, President, Black & Hardware Co., Galveston, Texas; Henry M. Robinson, President, First National Bank, Los Angeles, Calif.; Treasurer, John Jay Edson, Chairman of Board, Washington Loan and Trust Co., Washington, D. C. (Mail address, 913 F St.); Resident Vice President, Elliot H. Goodwin, Chamber of Commerce, U. S. A., Washington, D. C.; Secretary, D. A. Skinner, Chamber of Commerce, U. S. A., Washington, D. C.; Members of Senior Council, J. K. Goodwin, President, People's Bank, Charleston, S. C.; Harry A. Wheeler, President, Union Trust Co., Chicago, Ill.; Homer L. Ferguson, President, Newport News Shipbuilding and Dry Dock Co., Newport News, Va.; Joseph H. DeForest, Detroit, Michigan; and Eaton, Chicago, Ill.; Julius H. Barnes, President, Barnes-Ames Co., 41 Broadway, New York, N. Y.; Directors: John W. Arrington, President, Union Bleachery, Greenville, S. C.; M. W. Dunn, President, Nacole, Dean and George, St. Paul, Minn.; Robert B. Ellis, President, The Hensley-Kills Drug Co., Memphis, Tenn.; A. Lincoln Fiske, Treasurer and General Manager, Wm. Fiske's Sons Co., Boston, Mass.; P. H. Garland, Vice President, The United Gas Improvement Co., Philadelphia, Pa.; Carl R. Gray, President, Union Pacific System, Omaha, Neb.; Everett G. Griggs, President, St. Paul & Tacoma Lumber Co., Tacoma, Wash.; Lafayette C. Brown, President, Union Trust Co., Chicago, Ill.; Salt Lake City, Utah; Frederick J. Haynes, President, Dodge Bros. Inc., Detroit, Mich.; Dwight B. Heard, President, Dwight B. Heard Investment Co., Phoenix, Ariz.; Edgar W. J. Henry, Maynard & Child, Boston, Mass.; William T. Hinde, Hinde Bros. & Co., Bridgeport, Conn.; A. L. Humphrey, President, Westinghouse Air Brake Co., Pittsburgh, Pa.; Frank Kell, President, Wichita Falls Elevator Co., Wichita, Falls, Texas; James S. Kemper, President, Lumbermens Mutual Casualty Co., Pantonsville, Chicago, Ill.; Charles W. Lonsdale, President, Simonds-Building Lonsdale Grain Co., Kansas City, Mo.; Milton E. Marcuse, President, Bedford Pulp and Paper Co., Richmond, Va.; Edwin T. Meredith, Publisher, The Meredith Publications, Des Moines, Iowa; R. T. Moore, Vice President, Peavly Moore Lumber Co., Evansville, Ind.; Felix M. McWhirter, President, People's State Bank, Indianapolis, Ind.; M. J. Sanders, Hibernia Bank Building, New Orleans, La.; John W. Shartel, President, Oklahoma Railway Co., Oklahoma City, Okla.; Paul Shoop, Vice President, Southern Pacific Railway Co., San Francisco, Calif.; Alean T. Simonds, President, Simonds Saw and Steel Co., Fitchburg, Mass.; Harry A. Smith, President, National Fire Insurance Co., Hartford, Conn.; Ernest S. Tupper, General Manager, Nashville Roller Mills, Nashville, Tenn.; Owen D. Young, Chairman of Board, General Electric Company, 120 Broadway, New York, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; and that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds or other securities than as so stated by him.

MERLE THORPE, Editor and Publisher.

Sworn to and subscribed before me this 2nd day of October, 1924.

(Seal) LACY C. ZAPP.

(My commission expires September 20, 1927.)





*New Building, Chamber of Commerce of the United States, at Washington*

## "SUCCESSFUL MANAGEMENT IS RESPONSIBLE FOR SUCCESS—THOSE WHO DREAM DREAMS AND NOTHING ELSE FAIL"

*(President Grant of the United States Chamber of Commerce in Philadelphia last month)*

**T**WELVE YEARS ago a group of American business men caught a new vision. They saw the forces of American Business welded into a compact whole. They saw a federation of common interests, a new means of taking counsel on the problems common to all business. They saw a home in Washington serving as a clearing house for information bearing on these problems, a place where men might study and relate the facts. They

saw the authoritative results of this study made available to business men everywhere through the pages of a great magazine.

Their ideal was sound. The need was fundamental. Being men accustomed to achieve, the thing is now accomplished. The new home of the United States Chamber of Commerce pictured here is the new home of *The Nation's Business* as well.

Today:

*More than 41,000 Presidents of Corporations read Nation's Business  
More than 18,000 Vice-Presidents of Corporations read Nation's Business  
More than 18,000 Secretaries of Corporations read Nation's Business  
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## The NATION'S BUSINESS

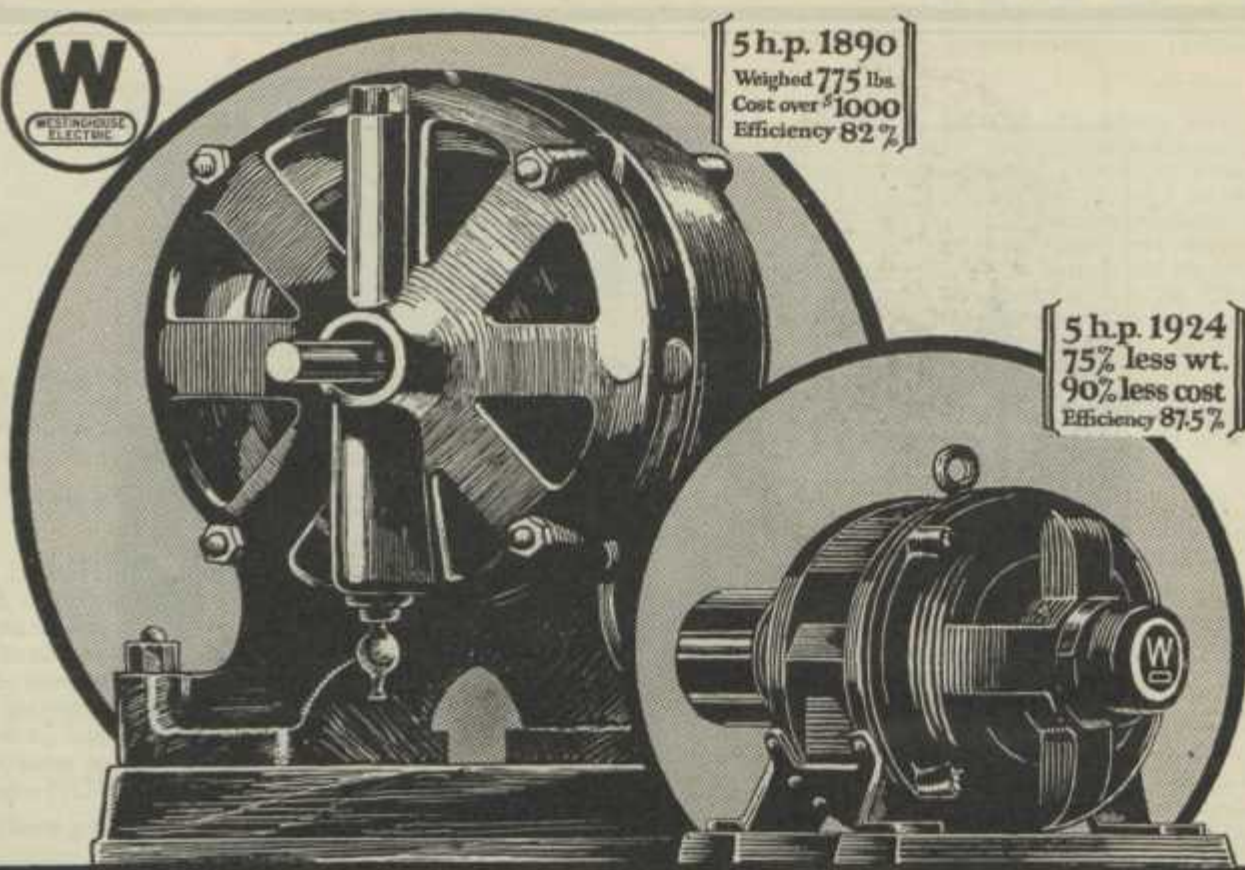
WASHINGTON



MORE THAN 165,000 CIRCULATION

MEMBER A. B. C.





5 h.p. 1890

Weighed 775 lbs.  
Cost over \$1000  
Efficiency 82%

5 h.p. 1924

75% less wt.  
90% less cost  
Efficiency 87.5%

## The Cash Value of Research

Seldom does one find more dramatic testimony to the work of the engineer and the laboratory than in the pictures on this page.

The motor of 1890 was a great improvement over the original Westinghouse-Tesla, the first practical alternating current motor to be built.

But in the years that have followed, the same Westinghouse research, which gave this new source of power to industry, has increased motor earning capacity and enormously decreased motor size and cost.

Had there been no improvement in design or in manufacturing methods, it would now cost more than \$1,000 to build the CS motor shown above, whereas with the improvements made by research, this same motor now costs only \$100 in spite of higher material and labor costs.

Facts like these—and there are many—prove that the great sums invested by Westinghouse in brains and equipment have paid enormous profits to American industry.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY  
EAST PITTSBURGH, PA.

Sales Offices in All Principal Cities of the United States and Foreign Countries  
Tune in with KDKA—KYW—WBZ—KFKX



# Westinghouse

© 1924, W. E. & M. Co.





Two unretouched photographs showing how quickly and easily costly shadows can be eliminated, merely by changing from a clear glass lamp ("bulb") to a bowl enameled Edison Mazda "C" lamp

## Good lighting means "not a shadow in the place"

**S**HADOWS cost money. They slow up production, spoil goods in the making, cause accidents and lower the morale of workers.

*Get rid of them!*

Facts prove that good lighting increases production as much as 25%, but the current bill scarcely at all.

If your lighting system has not been surveyed lately, the advice of our Lighting Service Department is yours for the asking. Victor

Talking Machine Company, The Shredded Wheat Company, Statler Hotels, Cluett, Peabody & Co., and hundreds of other leaders in America's industrial life, have profitably adopted our suggestions. Perhaps we can help you, too.

Entirely without obligation on your part, a man will be sent to "measure" your lighting and make scientific recommendations. Just write the Edison Lamp Works of General Electric Company, Harrison, N.J.

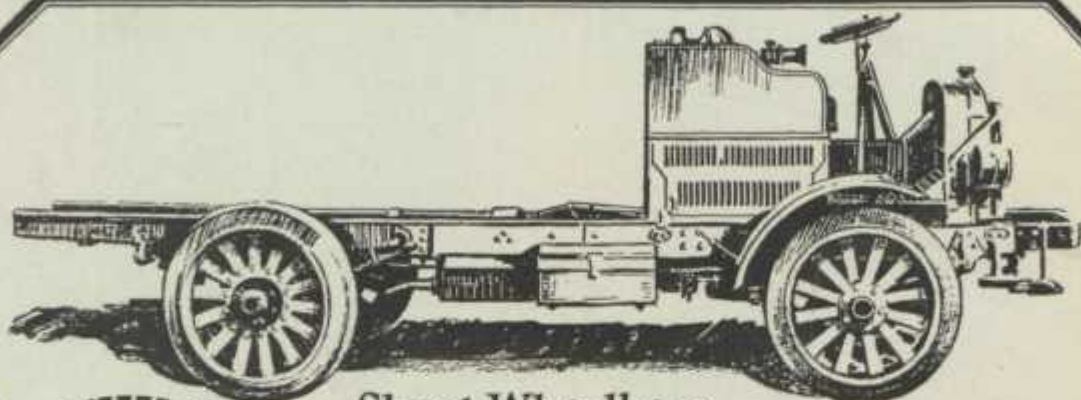
# EDISON

# MAZDA LAMPS

A GENERAL ELECTRIC PRODUCT



# Increasing traffic is making Autocar short wheelbase more and more necessary



The 2 to 3 ton  
4 cylinder  
**Autocar**  
(wheelbase 114 inches)  
turning circle is  
only 38 feet  
in diameter

**H**OW to haul goods quickly and economically through the ever thickening traffic of city streets is a big problem.

And right here the outstanding feature of Autocar trucks — short wheelbase handiness — shows to greatest advantage.

Autocars, shorter in overall length and turning radius, thread their way through traffic, use less parking space and easily pick up and deliver their loads in the most cramped and congested places.

**The Autocar Company, Ardmore, Pa.**

ESTABLISHED 1897

Direct Factory "Autocar Sales and Service" Branches or Affiliated Representatives in

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*Allentown	*Buffalo	*Erie	Memphis	*Paterson	*San Jose	*Washington
Altoona	*Camden	*Fall River	Miami	*Philadelphia	*Schenectady	West Palm Beach
*Atlanta	*Chester	*Fresno	*Newark	*Pittsburgh	Scranton	*Wheeling
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# Autocar

gas and electric trucks

**EITHER OR BOTH - AS YOUR WORK REQUIRES**